INDIAN INDUSTRY

M. CECILE MATHESON

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INDIAN INDUSTRY

YESTERDAY, TODAY AND TOMORROW

BY

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YESTERDAY, TO-DAY AND TO-MORROW

A HEALTH VISITOR

JAN 5 1932
THEOLOGICAL SEMINARY

INDIAN INDUSTRY

Yesterday, To-day and To-morrow

By

M. CECILE MATHESON

MEMBER OF THE BRITISH INDUSTRIAL COURT AND OF TRADE BOARDS
FORMERLY WARDEN OF BIRMINGHAM SETTLEMENT

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PREFACE

INDUSTRIAL conditions have long engaged the attention of the National Christian Council of India, Burma and Ceylon. Committed to the conviction that the Christian Message applies to the whole province of human life the Council cannot look on unmoved while great industrial developments, instinct with promise and peril to the peoples of a land hitherto predominantly agricultural, are gathering strength at an ever increasing pace. As far back as November 1924, when the Council met in Waltair, an arresting statement on the subject was made by Miss I. Wingate of the Young Women's Christian Association, and it was then resolved to inaugurate 'a study of industrial conditions in India with a view to creating a more vigorous public opinion and advancing Christian standards in regard to industrial reform'. Useful spade work by the secretaries followed; but it was felt from the beginning that in order to make the proposed survey adequate to the end in view the help of a trained investigator would be necessary. The matter was therefore laid before the Institute of Social and Religious Research in New York, with the happy result that the services of Miss M. Cecile Matheson, a lady well-known and widely respected in England for her experience in industrial investigations and welfare work, were made available for a period of two years to the Council for the purposes of the survey. By an equally happy arrangement the Young Women's Christian Association agreed to set apart Miss Wingate for the same good cause. With these guarantees the Council took decisive action at its meeting held in Calcutta in November 1926, and invited Miss Matheson to come to India and lead the survey. It also gladly accepted the offered co-operation of the Young Women's Christian Association, and further instructed its executive 'to take steps for the association of Indian men and women, both throughout the investigation and in local areas, with Miss Matheson in her work'. In accordance with this instruction

Mr. R. Manohar Lall, whose experience as a welfare worker in Nagpur under the Young Men's Christian Association made him a valuable ally, was associated with Miss Matheson and Miss Wingate and the team was complete.

The present volume is the outcome of their labours. The purpose of its publication is—in the words of the resolution adopted by the Council at its meeting held at Madras in January 1929: 'To give the needed information and guidance to the Council and to Missions and Churches in studying the subject further and in rendering suitable service to the industrial population.'

The views expressed are necessarily those of the writers themselves, and the Council does not therefore accept responsibility for them; but it commends the book to the serious study of all who have regard to human values as a valuable contribution, on the part of a group of well-trained and well-minded observers, to a subject that is beset with difficulty and is at the same time of paramount importance. Obviously the observers could not see things with the same eyes, and the impressions left on their minds are not always of the same colour, but in things essential they have reached a refreshing degree of unanimity, and the minor differences that occasionally appear are a healthy reminder that facts are sometimes capable of more than one interpretation. In any case it would have been a pity had the desire to reach substantial agreement robbed the book of the individual and personal touch that lends added interest to its pages.

This report does not claim to be a complete statement. It was not possible for the group to visit all the centres together, and the enquiry into labour conditions on the tea-gardens, for instance, had to be undertaken by Miss Matheson alone. Her personal impressions are graphically recorded in the chapter on Tea. But the book will have achieved its purpose if it serves as a guide to further study and points the way to useful action. Its appearance is timely; India has entered upon her industrial age and there can be no going back; a Labour Commission is abroad in the land and busy taking notes; labour questions are rapidly forcing themselves to the front and it is incumbent on all good citizens to understand the issues involved. It is, above all, important that Christian men and women in India should see their duty in regard to industrial problems and endeavour to make the mind of Christ the standard of living throughout the entire realm of industry. To all such this book brings a clear message.

It remains to the Council to express its warm appreciation of the conscientious way the commissioners have done their difficult task and its gratitude to the Institute of Social and Religious Research, the Young Women's Christian Association and the Young Men's Christian Association for the happy cooperation that made this survey possible.

J. Z. Hodge
Secretary, National Christian Council
of India, Burma and Ceylon

Poona
27 December, 1929

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INTRODUCTION

MODERN industry is a plant of comparatively recent growth in India, but it already boasts a large literature, so large that some apology for adding yet another book to the number might seem to need justification. The present modest essay is, however, the outcome of a desire on the part of the Christian people in India to have a reliable textbook, which would serve as a guide in criticizing the difficulties of the present and materializing hopes for the future. The reformer, who is above all things a humanitarian, and in India at least, rarely an economic specialist, is keenly conscious of the difficulties that confront him and those whom he fain would help. His help, if it is to be constructive and surely founded, must have relation to the past, with its successes and its failures, its virtues and its defects. He needs to see his immediate surroundings in their relation, not only to the country of his activity as a whole, but in their relation to the past and present of the human race. Above all, he needs to envisage his hopes for the future in the light of this larger experience, that will guide him as to what he may expect, warn him what to avoid and help him to draw from his field of work a contribution to the progress of mankind as well as an amelioration of present distressing conditions.

It seemed to the National Christian Council of India that no textbook in existence would serve exactly this purpose, and it was in the hope of securing one that they appointed a special Industrial Commission, first to tour India, visiting factories and workshops, cities and villages, and then to give a survey of present conditions together with what criticism, explanation and suggestions for building a happier future they felt able to offer.

The commission was small: an Englishwoman with long experience of industrial and social conditions in Great Britain, the United States and elsewhere, an Englishwoman with a long experience of social work in India, and an Indian man who had been engaged in industrial welfare work and adult education. The little company varied and for a time the second Englishwoman was replaced by an Indian lady. Journeys, interviews and visits were made most often in company, sometimes singly or in pairs. The survey occupied two cold weathers with much preparatory work before and much supplementary work in the intervening and succeeding months. It covered India from Tuticorin to Lahore, and from Bombay to Sibsagar in north-east Assam. Although many of the chief centres were visited more than once, all visits, whether long or short, left the same impression, namely, that very little had been accomplished in comparison with what there was to see and to learn, and this in spite of the generous help and co-operation that was received everywhere, from Government and local authorities, from factory owners and managers, trade union officials, tea-planters, missionaries, teachers and a host of others too numerous to mention, and including many in various walks of life who freely showed their homes.

To all these friends of the enterprise the most grateful thanks are tendered, and also to Miss Rose Squire, O.B.E. (late of the Home Office, London), and to a little group of officials and others, who have read the whole or part of the manuscript and have made most valuable criticisms and suggestions.

This little book therefore goes forth with a deep sense of its inadequacy and a plea that readers will remember that time and resources were limited and that the members of the commission have tried to carry out a scheme that they had not the audacity to evolve and that they advise because advice has been asked, although they themselves are still learners.

APPENDIX TO INTRODUCTION

LIST OF PLACES VISITED

I. *Winter 1927-1928*

- Bombay
- Ahmednagar
- Nagpur
- Sholapur
- Kiloskirwadi (Deccan)
- Ahmedabad
- Baroda
- Delhi
- Cawnpore
- Lucknow
- Calcutta and District
- Dhanbad and Jheria
- Jamshedpur
- Gosaba (Bengal)
- Madras
- Trivellur
- Bangalore

II. *Winter 1928-1929*

- Tuticorin
- Madura
- Trichinopoly
- Coimbatore
- Coonoor
- Calicut
- Madras
- Calcutta
- Shamnagar (Bengal)
- Cawnpore
- Etawah
- Aligarh
- Assam: Mariani
  - Jorhat
  - Armgoorie
- Darjeeling
- Bangalore
- Vellore
- Channapatna
- Mysore
- Poona
- Bombay
- Indore
- Ujjain
- Delhi
- Lahore
- Amritsar
- Lucknow
- Allahabad
- Asansol
- Bolpur
- Bezwada
- Guntur
- Dornakal
- Hyderabad

PART I

YESTERDAY

CHAPTER I

THE GROWTH OF INDUSTRY

It is not our purpose here to write an industrial history of India. That has already been done by others, but a brief summary must precede any discussion of the much-described present or a consideration of the problematic future. A certain light may also be shed on that distant scene by a recapitulation of some of the steps that have brought Indian industry to its present stage of development, especially if we consider these stages in relation to analogous developments in the progress of the western countries towards the highly organized industrialism that characterizes them to-day.

It is often said that India is a unique aggregation of races, complex yet individual, and with her own especial contribution to make to world history and development. This is true of every country or group of countries, and it may very possibly be more true of India than of others, but it is also very possible to exaggerate this idea of uniqueness or aloofness from the rest of the world. India is a region of great differences and contradictions, embracing, as she has done for ages, a strange union of high civilization with semi-barbarism or backwardness. Her civilization, too, has to-day a cosmopolitan tinge which makes it fatally easy for the superficial observer to exaggerate or to under-estimate the uniqueness of India according to his limited personal experience. This mingling of past and present, and of different stages of development, makes India peculiarly fascinating to the historian. So many customs of the past, of which we can only read in the west, are part of contemporary life in the east, and if the west can give clues to whoso would read the future in India, the east can give many a clue when we try to unravel some of our contemporary problems in the west.

Climate, history, environment, religion and custom—these and other forces combine to produce a nationality, but the old saying that 'human nature is everywhere the same' is not without truth, and links India with her population of three hundred and thirty-two and a half millions to the other six-sevenths of the human race.

The starting point of industry in all countries is to be found in the self-sufficing community, be it clan, estate or village. In the west, dominated by the feudal system in the early mediaeval period, the estate idea early dominated the village. In India, where there seems to be as a rule little intercourse between the big landowner and the peasantry, the village is a peculiarly complete unit; and the vast size of India, the long absence of roads and facilities for transport, the present remoteness of large districts, and the absorption of industrial life and custom into religious organization, have combined to perpetuate this phase of Indian life.

In the west it has long since passed away and the ideas of local self-government and responsibility are in places still in process of re-birth. In India they are the inheritance of the great majority of the population, and the sense of belonging to a definite locality survives in spite of all the migration and new experiences consequent on modern industrial organization.

India has never lived through a feudal period parallel to the mediaeval west and she has therefore escaped certain influences, both educative and the reverse. She has missed the curb on royal despotism, provided to a certain extent and late in life by alien rulers, and she has no race of small local magnates who may be despots, but who equally may be beneficent and conscientious administrators.

On the other hand, this isolation of the Indian village has begotten a powerful democratic spirit much more natural and dignified than the noisy youth of its western parallel. The Indian villager may be, and is, appallingly backward in many things pertaining to the amenities and necessities of healthy life; but within the narrow bounds allowed him by custom and poverty he possesses a shrewdness and sense of responsibility that augur well for the plans of the many reformers who see in the reconstruction of Indian village life the great hope for the future of India.

Turning more particularly to the industries of the village, one finds the usual emergence of the trades most necessary to ordinary life, e.g., weaving, pottery, working in metal, carpentry, etc. Other trades develop according to local custom and local raw materials, e.g., basket-making, leather work and other arts and crafts, and the question of interchange with other localities follows. In many villages in India these old trades survive with an almost primeval simplicity, even accompanied with a payment in kind that may work well in times of plenty but is apt to leave the craftsman stranded when the harvest is poor.

In the west the dawn of extra-communal trade led to frequent travel and stimulated the rise of the guild system, under which a trade became a jealously guarded privilege and a mark of distinction, characteristics of which traces still remain, despite the assaults of snobbery and false pride.

The guilds, too, became corporations of tremendous power and thus formed a bulwark against royal or aristocratic despotism and provided a nursery for future rulers and diplomats of a more democratic order.

India, on the other hand, has her caste system, which appears at first sight to be a great simplifier of life, making both for contentment and stability. Just as under the old guilds, the Hindu is born to his trade, but in India most of the handicrafts are marks of low castes or of outcastes and therefore carry little possibility of honour. This does not make for progress or initiative. Being a mark of inferior birth, craft is not held in high esteem and is therefore not likely to be organized as a socially educative force, such as was often the case in the west.

This does not apply to the Mohammadans, who are not under the rigid sway of caste, a fact which possibly has a bearing on the development among them of higher skill in certain handicrafts, as for example in some of the finest weaving and in the use of the power-loom. They seem to have made these trades peculiarly their own, although by no means to the exclusion of the ancient caste of Hindu weavers.

The essence of the guild was its dynamic power. Every boy entered it with prospects of promotion both commercial and social. The caste system is a static force. Both ideas have advantages, and there are many who congratulate the Indian on his unworldliness and lack of ambition; but these qualities encourage a fatalism inherent in his religion that leaves him singularly powerless in face of poverty and oppression.

This encourages, too, the mediocrity of work that characterizes many of the old village trades. This is said without any disrespect to the wonderful handicrafts for which India has always been famous. These are not primarily village products. They have developed in the cities and centres of political influence, chiefly in the north, and wherever the presence of some kind of court has provided a market for such luxuries.

In the villages the old methods and patterns go on from generation to generation and from century to century, changing as little as do the customs and habits of the people, and surviving to an extraordinary degree, in spite of the inroads of modern industrialism and the adoption of western conveniences.

The transition from domestic hearth to factory follows similar lines all over the world. Gradually there appears the aggregation of workers under one roof. This may be a joint workshop, which has never quite died out even in England in such trades as tailoring and jewellery. Then the leader with organizing power may emerge and take control, a stage that develops long before the introduction of power rushes it into maturity. This small workshop is to be found everywhere in India and in practically every trade. Sometimes it exists side by side with a highly developed factory industry and the 'fringe of factory workers' ply their trade alternately at the power machine or in the bazaar.

Such an alternation is, however, very characteristic of Indian life. Modern large scale industry looms large in the public mind and is apparently of great importance and influence, but it employs in reality only about one and a half millions of the population, or 4·8 in every 1,000, and a large proportion of these remain agriculturists at heart, returning to their native villages at longer or shorter intervals and always with the ambition to return at long last to the ancestral home, even if it be only a mud hut that will need rebuilding on their return.

It is small wonder, therefore, that the handloom and potter's wheel still persist in undiminished numbers, even while the products of the factory tend to raise the standard of living by making cheap goods accessible to Indian men and women for the first time in history.

The weaving trade offers an example of this development. Many of the distinctive Indian saris, like the old Scotch plaids, are not suitable for power loom production. The number required of any one kind is too limited and the design is too intricate to make it worth while to set up the loom, hence the hand weaver prospers. Meanwhile, the new looms installed in Bombay and elsewhere since the War, pour out fancy shirtings and cloths which are eagerly bought up by the villagers, many of whom were formerly perforce contented with loin-cloths. Opinions among the clothed vary as to the desirability of this change but the temperature in India is not always high and the Indian is very sensitive to cold. As one Bombay manager remarked to the writer, ‘ we are not taking trade from anyone. We are literally clothing the naked.’ The writer, for one, rejoiced in the change.

No one can tell how far this position will be modified in fifty, twenty or even in ten years; but if we are alive to its facts and possibilities there can be a reasoned advance, an effort to think out what co-operation between ancient and modern forms of industrial organization will best serve the peculiar needs of the Indian peoples, lighten their poverty, utilize to better account the patient labour of their women and set free creative, artistic and educative instincts that are crushed out to-day in a large proportion of the people by a pitiless struggle for existence.

CHAPTER II

THE COMING OF PROTECTIVE LEGISLATION

It seems to be the fate of all countries that the transition from ancient to modern methods of industrial organization should involve chaos and suffering. England has probably been the worst delinquent and the worst sufferer in this respect, even as she was the first country to adopt the modern methods. Other countries have profited by her experience and have striven betimes to curb the forces of individualism and competition before exploitation had branded a new industrialism. India has been perhaps especially alive to the perils of the new industrial order. There have been hardships, child-labour and bad conditions and many defects still exist, but they have not been allowed time to rivet themselves upon the necks of a working population that is in some respects peculiarly helpless.

The story of Indian factory legislation presents all the features familiar to students of modern industrial history in other countries, but it is intimately linked with British history, and the veteran Lord Shaftesbury, the protagonist during a long span of years of the British child, was, in July 1875, the first to raise the question in the House of Lords of the 'terrible exhaustion, dust, 16 or 17 hours a day of unremitting labour and a temperature varying from 90° to 100°, which were the lot of the Indian operative'. Some months previously the Marquis of Salisbury, then Secretary of State for India, had called the attention of the Bombay Government to the long hours, absence of weekly rest and overwork of children which had been brought to his notice by prominent civil servants in India. Investigation on the spot showed that children were at work from eight years upwards, that the hours of work were generally from sunrise to sunset with half an hour for rest in the middle of the day and that 300 to 320 days were generally worked in the course of a year.

In Bengal there were cases of the employment of children at five and six years of age but the majority were probably over ten and their normal working day was nine to ten hours in length. Reform and protection seem to have come very gradually, judging by to-day's standards, but it must be remembered that, when these facts became public, matters were not very far advanced in England and the 'House of Commons was engaged on the consideration of a Bill designed to restrict hours of work for women in British factories to 56, and the liberal individualists of the day, not content with opposing the Bill, were endeavouring to remove the existing restrictions on the employment of women in England'.[1]

In 1877 the Government of India also entered the fray and prepared a draft bill. For four years the conflict raged. Opposition followed its usual course and all the arguments already familiar in other countries were brought forward by the various interested parties and strengthened by the suspicion that the proposal for protective legislation really emanated from a Manchester alarmed for its own trade in face of growing competition on Indian soil.

At last, on 1st July 1881, an attenuated Act came into force which has been described as 'a triumph for conservative opinion'.

Its application was limited to factories employing a hundred or more persons, using mechanical power and working more than four months in the year; but indigo, tea and coffee factories were excluded. The employment of children under seven was forbidden and those between seven and twelve years of age were only allowed to work nine hours a day, subject to local rules as to rest periods. They were also allowed four holidays a month. 'Provision was made for fencing, for the reporting of injuries and for the appointment of inspectors.'[2]

One result of this legislation was the disappearance of children from about one-third of the mills in Bombay, as the managers preferred their absence to working special rules to secure their intervals of rest.

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[1] A. G. Clow, M.A., *Indian Factory Legislation: An Historical Survey*. p. 5. (Bulletins of Indian Industries and Labour. No. 37, 1926.)

[2] ibid., p. 7.

No one seems to have been satisfied and ten years followed of representations, criticisms and special enquiries. Important amendments were made in 1891. The number of persons necessary to constitute a factory was reduced to 50, with permissive power to Local Governments to reduce this number to 20. The new Act also extended the provision for a weekly holiday to all operatives and enforced a mid-day rest period of half-an-hour. The working age of children was raised to nine and their working time was restricted to 7 daylight hours until they reached the age of 14.

Women were forbidden to work more than 11 hours, with an interval of one and a half hours' if they worked the full time, and their night work was restricted. Authority thought that the question of factory legislation was now settled ; and there was some excuse for this view, for it is probable that conditions were not wholly unsatisfactory in the larger factories at this period. In many smaller ones, as has often happened elsewhere, the personal relationship between all ranks atoned for much inadequacy. On the other hand, evidence had disclosed very bad conditions, especially in ginning factories and these were left untouched, although in some of them 'women were employed for long periods for 23 hours a day, two or three hours being the longest time for which they could be absent. . . . In the busiest season the hands worked for several days and nights without stopping. . . . The Commission, in recommending that women and children be employed, daily for *only* 16 hours with 2 hours' rest in factories working for less than six months in the year, certainly carried out, from one point of view, their professed desire to be "moderate" in their recommendations.'[1]

During the last decade of the nineteenth century and the first of the twentieth the housing difficulty began to make itself felt in the larger centres of industry and the custom arose for the industrialists to house a proportion of their workers. Moreover, the frequent scarcity of labour gave some stimulus to the maintenance of decent conditions as understood by them at the time, a very different matter from meeting the requirements of modern science and hygiene. On the other hand a period of flourishing trade, coinciding with the introduction of electric light, facilitated a steady rise in the hours of work and a growing tendency to evade the restrictions on child labour. Factories increased rapidly in number and the arrangements for their inspection proved growingly inadequate. In the *Times of India*, in September 1905, the editor 'framed a terrible indictment of the conditions in the Bombay mills, dealing in turn with the long hours in a fœtid atmosphere, the effects of the terrible physical strain on the operatives . . . the working of children by night, the employment of "immature adults" . . . and the failure of the inspecting system'.[1]

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[1] op. cit., p. 15.

Two years later, a Government committee headed by Commander Sir A. P. Freer-Smith reported from Lucknow: 'There is no system of half-time shifts, all the half-timers doing the full day's work of 13¾ hours. The proprietor admits that this is the practice and pleads scarcity of labour. Examined 39 half-timers; nine of them appeared to be under nine years, and three of them were probably not over seven years.'[2]

And again: 'In Calcutta, the headquarters of a special Factory Inspector, from 30 to 40 per cent of the children employed in jute factories are under the legal age of nine years and 25 per cent of the young full-timers are under the legal age of 14 years; in 17 out of the 29 cotton factories visited by us outside the Bombay Presidency all the children under 14 years of age are regularly worked the same hours as adults. . . . The Agra hours are from 13¾ as a minimum to 15¼ as a maximum. . . . In Lucknow the actual working day is 13¾ hours. In the Calcutta jute mills the weavers are on duty for 15 hours, and this is, in some cases, extended to 15½ or 16 hours. In Sholapur the hours range from 12½ to 13½, in Delhi they are from 13½ to 14½ a day. In Amritsar and Lahore the hours average 13¾ in the hot season, and in some cases amount to 13 hours throughout the cold weather.'

In Bombay 13 to 13½ hours were worked and in Ahmedabad a case of over 14 hours a day is recorded, Sholapur on occasion beating even this record with 15½ hours. Further, in a very large proportion of the ginning mills, of which there were already over one thousand in India, the Committee considered that the health of the operatives was being injured by night work. These last factories have always presented special difficulties. Many of them are isolated and in remote districts; the work of inspection is therefore difficult. It is still probably only the intermittent nature of the work that saves the women operatives from serious effects on their health, and, for the same reason, it is often difficult for inspectors to insist on expensive alterations and equipment to improve the working conditions. It is fair to add that there were a few firms, notably in Cawnpore and Madras, who had already discovered that excessive hours were uneconomical and had adopted a twelve or eleven hours' day.

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[1] op. cit., p. 34.

[2] op. cit., pp. 39–40.

Something was achieved, however, by agitation and publicity, and when the Act of 1911, the basis of all subsequent legislation, came into force, with its insistence on a twelve hours' day, the changes were accepted quietly and a new period of industrial history began. Much, very much, still called for remedy, but it would take too much space to follow here all the stages of agitation and reform. Suffice it to say that the question of industrial conditions has never been allowed to slumber for long, that amending acts and improved administration have gradually raised the standard of working conditions and that in India, as elsewhere, the enlightened employer has borne his share in paving the way for reform by his pioneer experiments in 'welfare'.

PART II

TO-DAY

CHAPTER I

DISTRIBUTION OF FACTORY INDUSTRIES

The factory industries of India find employment for, about one and a half million men, women and children, women furnishing about 16·6 per cent of the labour force, and children, i.e. boys and girls between the age of 12 and 15 years, another 4 per cent.

This means that about ·45 per cent or 4·5 per 1,000 of the population of India are spending a large part of their lives in contact with power driven machinery, working in groups, occasionally from 10 upwards in number, but generally from 20 upwards to a figure that may run into several thousands. It takes no account of the far greater number who are engaged in related work, growing the cotton, jute, rice, sugar and tea that form the raw material of the majority of the factories; or of about 270,000 men and women who are mining the coal and metals required for their use, and of the transport of these raw materials by rail, road and water, though it does include the 10 per cent of the factory force who are employed in the railway workshops.

The manufacture of jute and cotton claims about 62 per cent of these factory workers, of whom 44 per cent or considerably more than one-third are engaged in the seasonal trades of ginning, pressing and baling. The factory side of the tea industry gives part time employment to about 44,000, and rice and sugar mills are responsible for 83,219; so that altogether upwards of 500,000 are engaged in seasonal trades, which are either combined with some other factory industry or far more often with agriculture.

One is almost tempted to ask whether the one million who are responsible for the 'perennial factory' industries of India are not almost a negligible factor in view of the tremendous problems and difficulties that face this country, or rather, this aggregate of countries. On second thoughts, however, comes the remembrance that these million human beings are a crowd of individuals with their individual hopes, fears and difficulties, and that on them depends an altogether disproportionate part of the fortunes of their country. For unless industry functions smoothly, what of the fate of the army of contributory workers, not to speak of the contribution of modern industry to the financial stability of the nation?

There is of course a large export trade in raw or partly-worked materials, but as far as statistics are available, out of every eight acres that India cultivates, she retains the produce of seven for her own use, and her well-being therefore depends to a large extent upon her own industry.

We have dwelt upon the small numbers engaged in factory industry in comparison with the life of the whole country, but the phase of industry under consideration is but a section of the industrial life of India. The published figures[1] relate only to British India and take no account of the growing factory industries of some of the Native States, notably Baroda and Mysore, nor of the countless domestic workshops and small factory concerns that do not come within the scope of the factory inspector. India is a land of contradictions, and if she has in full measure the lassitude and love of idleness that are probably inseparable from an eastern climate and, moreover, a malaria-ridden country, she is also, from another point of view, a veritable hive of industry. Sooner or later much of this industry may prove to be the foundation of new centres of industrialization, and, if the lock-makers of Aligarh in the north, or the trunk-makers of Madura in the south, are presently to be absorbed into the factory system, it is the more urgent for that system to be so organized as to offer its recruits a decent livelihood earned under decent conditions.

Again, when planning for future developments, it will be well to remember that the present combination of the old and the new will exist for a long time to come in India, and, just as no one Indian problem can be studied for long before the enquirer finds himself immersed in questions of agriculture and rural life, so should no factory changes be considered altogether apart from the related problems of home industries, and, above all, of housing and domestic amenities.

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[1] See *Large Industrial Establishments in India, 1927* (Government of India, No. 2082); also *Statistics of Factories Subject to the Indian Factories Act for 1926* (Government of India, 1928).

For example, since 1918, there has been an immense increase of power-looms in India, which turn out millions of yards of cotton cloth, chiefly of the cheaper varieties. Side by side with this activity, the hand-weaving of traditional and higher class goods does not seem to decrease, although in many districts the weavers are wretchedly poor. On the other hand, it is quite possible that the coming of machine-pressed aluminium cooking ware will in time injure the hand-hammered brass trade and even the potter's wheel, or that large scale industry will in time respond to the universal demand for tin trunks of every size and colour.

It is very doubtful whether India will ever achieve her ambition to be altogether self-supporting. It is also doubtful whether that ambition is wise on economic grounds alone, but it is clear that if education becomes more widespread and the multitudinous efforts, humanitarian and scientific, that are being made to raise the standard of living of the masses of the people, have any measure of success, an almost unlimited internal market will develop for inexpensive goods that lessen the risks and hardships, and contribute to the decencies, of life. To serve the masses these goods must be cheap, and to be cheap they must probably be produced by that highly developed form of co-operation which is the ideal name for what is more commonly known as the factory system.

But our concern at the moment is with the present, upon which the structure of the future must rest. Present industrial enterprise is unevenly distributed over India, and this is especially true of the big staple trades of cotton and jute. Quite half of the industrial enterprises and 69 per cent to 70 per cent of the industrial workers are to be found in the Bombay, Bengal and Madras Presidencies, and Bombay City and Ahmedabad together account for nearly 58 per cent of the cotton mills and about 60 per cent of the cotton operatives (excluding cotton ginning and pressing). In addition, there are important groups of mills in Cawnpore, Sholapur and Nagpur in British

India, and in Baroda, Bangalore and Indore in the Native States. The well-known Buckingham and Carnatic Mills are in Madras City. Coimbatore and Madura are important centres of the industry and there are isolated mills in many other places.

It is easy to see how this situation has come to be. Bombay is an important port and therefore a convenient centre both for the collection of raw material and the distribution of manufactured products. The same is true to a lesser extent of Madras.

Ahmedabad and Baroda, Cawnpore, Coimbatore and Indore are within easy reach of cotton growing districts and command extensive local markets, although Cawnpore and Madras goods are also to be found everywhere in India. The demand for cotton yarn and cloth is universal, and foreign competition diminishes in intensity with remoteness from the coast. Science is actively experimenting on improvements to the raw material and the opening out of new districts for its cultivation. The presumption is, therefore, that the isolated cotton mill will become an increasingly familiar sight from the windows of the railway carriage, and that small groups of mills will prove more economic in the long run than the huge concentrations of Bombay and Ahmedabad. Particularly is this so in a city like Bombay, pressed on the one hand by Japanese competition and on the other by labour disputes engendered not only by industrial grievances, but also by overcrowding and extraneous agitation—two evils to which less congested areas are naturally less prone.

Jute, on the other hand, is concentrated practically entirely in the province of Bengal. It grows in the damp water-logged areas, and is transported by the many waterways; half of it is pressed and exported from the Calcutta docks, and the other half is manufactured in the large low mills that give a curious and unique picturesqueness to the banks of the Hooghly.

Apart from the railway workshops, and the group of big concerns in Western Bengal and Orissa, engineering on a small scale is distributed over the whole of India. The location of the above mentioned large works has probably been determined by their proximity to coal and ore, and it is at least doubtful whether this heavy industry will become more widely spread on a large scale in a climate that adds so much to its arduous nature.

The other industries of India are on a comparatively small scale, if we except the large woollen mills in Cawnpore, Thana and Baroda and the growing match industry. There is a large export trade in leather, and as the making of leather goods is a widely spread domestic industry, it is quite likely that this trade will develop elsewhere than in Cawnpore, its present chief centre. Brush-making, too, may become widespread as the standard of living rises, and there is also an increasing demand for the woven garments that are not stockings and are known generically as hosiery. It is probably only the cheapness of labour and the cost of transport that combine to keep shirt-making a domestic industry, and possibly the same is true of the universal bidi-making.[1] The domestic milling of rice and flour and the old-fashioned seed-crushing are yielding steadily to the new methods.

If, therefore, power on the one hand and education on the other became more readily available, it looks as if we might expect to see an enormous addition to the number of small and moderate-sized factories. Each might serve a comparatively restricted area where distance from the coast offers some protection from the competition of more highly organized countries, some of whose methods are still, and let us hope will continue to be, foreign to India.

Such a development is very greatly to be desired in many respects. It would make the resources of civilization more readily available, and it would give the people a means to supplement their agricultural earnings without necessitating such a break up of family life and tradition as is often the case at present. On the other hand, the isolated factory or the remote industrial centre is too secure from observation. Both in England and America we have experienced to the full the dangers of sweating under such circumstances, and there is very little hope that India will not suffer in equal, if not in greater, degree, unless there is a great increase in public interest and in the power of an instructed public opinion to supplement the activities of the factory inspectors in all parts of the country.

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[1] The form of cigarette, made of country tobacco, rolled in leaves, that is in universal use by the working-classes in India.

CHAPTER II

PRESENT INDUSTRIAL LAW

THE Indian factory laws are the concern of the Indian Government and the head of the Department of Industries and Labour is a member of the Viceroy's Council. The factory laws leave much scope for adaptation to meet local needs, and the Provincial Governments have power to add rules and even to legislate with the consent of the Governor-General-in-Council. The Provincial Governments are also charged with the duty of administration.

The main Acts affecting industrial welfare are the Indian Factories Act, 1911, as modified up to June 1926, the Compensation Act, 1923, the Indian Mines Act, 1923, and the Acts dealing with the registration of Trade Unions and Co-operative Societies and the Trade Disputes Act.

(a) Scope and Administration

Under the Factories Act, a factory is a place of manufacture where power-driven machinery is in use and where not less than twenty people are employed on any one day in the year. The definition may be extended by the Local Governments to include any work-place where not less than ten persons are so employed. This power has been advantageously used in some parts of the country to enable the inspectors to protect persons working in dangerous or unhealthy industries, but any one familiar with the congestion of a typical Indian town will realize how difficult must prove any extensive attempt to control the small workshops.

A child is a person under fifteen years of age, and between the ages of twelve and fifteen he or she may only be employed as a half-timer.

The inspectors are appointed by the Provincial Governments and must have no financial interest in any business under their charge.

A district magistrate is, *ex-officio*, an inspector of factories, and other public officers may be appointed to act as ‘additional inspectors’. At first sight one wonders whether this power to utilize the services of other officials might not be more freely used to compel observance of the law, but the records of the past are not altogether encouraging in this respect, any more than they are in Great Britain. Still, it is always possible that both men and women may be found in the future who are ready to study industrial questions and who could give valuable service in relieving the pressure upon an often overworked inspectorate.

The inspectors are responsible for compiling the provincial registers of factories and for inspecting the notices and abstracts, employment registers and other prescribed records. They have the usual powers of entry and examination and have a very wide discretion in matters pertaining to health and safety. There is at present only one woman inspector, a doctor, who is a member of the staff in Bombay.

In 1926, 88 per cent of the factories were inspected. Sixty-five per cent of those that escaped attention were in Bengal and Assam, where the staff was temporarily depleted, and where many of the tea factories are difficult of access and work for a short season only.

In 1927, there were 3,059 inspections in these two provinces, 370 factories being visited three or more times and 824 once only, while 414 were unvisited. The opening of a new sub-office at Jalpaiguri should do much to remedy this.

In Bombay Presidency, in spite of the remoteness of many ginning factories, out of a total of 1,661 factories that worked during 1928, only nine perennial and six seasonal factories were totally uninspected and 575, or rather more than one-third of the total, were inspected three or more times.

In the United Provinces there are only 332 factories, but they again are widely spread and the staff is very small. Here 41 remained uninspected, and 112 were visited more than once in 1927, in spite of the fact that 101 gins and presses work for a short season only. ‘In the Central Provinces and Berar only 3 factories out of 677 were uninspected and in . . . Madras and Punjab the percentage of uninspected factories was less than 4 and 7 respectively.'[1]

The certifying surgeons are also appointed by the Local Governments and have the duty of examining all children who are candidates for employment and of judging not only of their general fitness but also of their probable age. Certificates can be cancelled or suspended.

In Bengal the certifying surgeons also certify and re-examine quarterly all women and other persons under eighteen who are employed in any operation involving the use of lead compounds.

(b) Health and Safety

A factory must be kept clean and free from offensive smells. To achieve this object the Governments of Bombay, Bengal and the United Provinces order a yearly lime-washing of the walls and ceilings of all rooms, passages and staircases, and any rafters, doors or other woodwork exempted from this rule must be painted and varnished in Bengal every five years, and in Bombay Presidency and the United Provinces every seven years, *and kept clean.* Certain exceptions are generally allowed, viz. store-rooms, rooms or tops of rooms made of galvanized iron, tiles or glazed bricks, and certain workshops, or parts of workshops, in connexion with the manufacturing of gas, chemicals, cement and oil, and in engineering workshops and foundries in which there is 2,000 cubic feet of air space per person employed. In the United Provinces, all roofs or ceilings made of corrugated iron sheets of which the lowest height between roof and floor is less than twenty feet, must be painted, and in addition, whitewashed at least once in fourteen months. There must be no accumulation of refuse likely to cause a nuisance within the factory precincts.

The workers must not be overcrowded. Bengal insists on 500 cubic feet of air space per worker, not reckoning any height above fifteen feet from the floor, a more generous allowance than in England. The United Provinces increases this figure to 700 cubic feet where mechanical or electrical power is used. Also 'the manager of every factory shall maintain a register showing the measurement and cubical content of each room in the factory, the area of the floor space . . . occupied by the machinery or other fixtures and the area provided for ventilating openings'. This, of course, does not touch the small workshops, which are often overcrowded to an extent that must be seen to be believed.

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[1] Statistics of factories subject to the Indian Factories Act for 1926.

All rooms must be ventilated and the atmosphere kept free from industrial impurities. If artificial humidification is necessary, the water used for the purpose must be of drinking water standard. This last requirement chiefly affects Bombay Presidency and the United Provinces where special rules regarding humidification and the maintenance of hygrometers are in force. The Act leaves much in the way of equipment and fencing to the discretion of the inspector. A very high standard has been reached in ventilation, mechanical exhaust and humidification in the best works; experiment and modernization are being rapidly extended.

Every factory must be sufficiently lighted, and, here again, the inspector has power to prescribe standards and methods, subject, as in other matters, to the manager's right to appeal to the Local Government.

Sanitary accommodation must be suitable and sufficient. Bengal orders limewashing every two months, Bombay and the United Provinces twice a year. In most districts a fairly high standard of equipment is required, and even in small mofussil (up-country) ginning factories one chief inspector reported that there was little difficulty in getting his orders carried out. The difficulty of securing cleanliness and decent maintenance is not peculiar to India, although it must be greater where the workers come from primitive villages than among the more or less literate city populations of the west.

Indian factories deal very largely with highly inflammable materials, and this in a climate where fire is an ever-present danger for many months in each year. Efficient means of escape and fire-fighting must always be available, and naturally extra provision is necessary in the many-storied cotton factories. The insurance companies also do their part, and a complete system of automatic sprinklers is the rule and not the exception. Except in factories built before 1911, doors must slide or open outwards, and smoking or the use of naked lights in the vicinity of inflammable material is forbidden. In the United Provinces, ginning factories must have at least two flights of stairs made of brick or other fire-resisting material.

It is not altogether easy to obtain reliable statistics about fires in India, but the impression one gains from the inspectors' reports is that the danger is too real to be trifled with. In Bombay, for example, there were 3 fatalities from fire in 1928 with 14 serious injuries and 9 minor ones. Most of these accidents occurred in a match factory in the box-filling department, and special guarding and fireproof garments have been introduced as a result. Hot substances and flames were responsible for 370 injuries in Bengal and the United Provinces in 1927—figures which include 8 deaths and 52 serious injuries; but when one remembers the magnitude of the chief engineering works these figures cannot be considered excessive.

All dangerous machinery and openings must be fenced, some as prescribed by law and more as prescribed by Provincial rules and the local inspectors. If imminent danger to life is suspected, work may at any time be suspended by order until compliance has been obtained. Women and children are forbidden to clean power-driven machinery when in motion. The employer must provide, free, tight trousers or shorts for men who have to replace belts, oil the bearings of shafting, etc., the loose *dhoti* worn by many Indians being highly dangerous for such duties.

The inspector may prohibit the presence of children under twelve years of age in any factory or its precincts. No woman, child or young person under eighteen may be employed in the manufacture of lead, but the special rules governing the use of lead compounds apply equally to men and women. Special protection against the danger of highly inflammable dust is given by the rule that no woman or child may be in a room where a cotton opener is at work unless its feed and delivery ends are in different rooms, in which case the prohibition does not apply to the delivery end. Notice must be given of any accidents causing death or bodily injury sufficient to incapacitate from ordinary work for 48 hours or more. If absence for 21 days or longer is entailed the accident is reckoned as 'serious'. In 1926, 14,866 accidents were reported, 270 of them being fatal and 3,155 serious. The percentage of fatalities was thus 1·8 per cent of the total as compared with 0·62 per cent for Great Britain during the following year, but an exceptional catastrophe in an iron and steel works in Orissa makes the difference greater than usual.

Roughly speaking, in India there are slightly over two accidents a year per works under inspection.

Building construction, ship-building and docks furnish the greatest number of fatalities in Great Britain, and falls account for nearly one-third of the deaths. Taking Bombay and Bengal together, falls are responsible for only 6 per cent of the accidents and 19 deaths (16·8 per cent). On the other hand, falling objects, transport within works, accidents with machinery and with hand tools all bear a higher proportion to the total number of accidents than is the case in England; but any exact comparison is difficult, especially as hand tools are more widely used in India than in England.

A feature peculiar to India is the enormous proportion of accidents occurring in railway workshops. In Bombay alone about 28,300 men are employed in this industry, i.e. only 7·4 per cent. of the labour force of the whole province, but nearly half the accidents come from this source. In the United Provinces, about 21 per cent of the workers under the Factory Acts are employed in the railway workshops and they have about 80 per cent of the accidents. Most of the inspectors agree, however, in considering that though there is room for improvement in this class of works, the companies' liberal interpretation of the laws relating to notification and compensation greatly increase the number of accidents reported and exaggerate the seriousness of many of them.

(c) *Hours of Employment and Holidays*

Subject to certain exceptions, no person may be employed in a factory for more than sixty hours in any one week or eleven hours in any one day. There must be no spell longer than six hours without an hour for rest; but if the workers prefer, half an hour's rest to each five hours' spell may be substituted, and the arrangements tend so to work out that the five hours' spell is the usual one. If eight and a half hours or less are worked per day and no spell is longer than five hours, men may have the daily rest period reduced to half an hour if they so request and the Local Government gives permission.

Sunday is a general holiday unless there is a public holiday on the three days immediately preceding or succeeding it. Sunday work may be substituted if previous notice is sent to the inspector and also posted in the factory. Ten days is the longest period that may be worked without a whole holiday. No person may knowingly be employed in more than one factory on the same day, although the Act allows certain exceptions for men. Muster rolls or other records must specify the periods of employment and rest arranged for each worker.

The eleven hours' work permitted daily to women must lie as a rule between 5.30 a.m. and 7 p.m. A local order may vary the starting time to 5 a.m., in which case the factory must close at 6.30 p.m. or to a later hour with a corresponding latitude in the evening, provided that no woman is asked to work after 8.30 p.m. In other words, women may not be employed in factories at night.

Children must be twelve years of age or over and must have a certificate of age and physical fitness for employment from a certifying surgeon. Their daily hours of work are limited to six and they also may not work at night. They must have at least half an hour for rest and no spell of work may exceed four hours if they work for five and a half hours or more. A half day of five hours seems to be the most usual arrangement.

No child over six years of age may be found in any room where employable children are at work, a regulation that is not always easy to enforce on chilly mornings.

Exemption for adults may be claimed from these rules regulating holidays, hours and rest periods for necessary preparatory work, intermittent or seasonal work, continuous processes or work necessary to the daily supply of prime necessities to the public, or in circumstances of unusual pressure. Such exemption is only granted on condition that all hours in excess of 60 per week shall be paid at 25 per cent more than the usual rates. Women may never work more than six hours' overtime in any one week, and the total hours of men may not exceed 72 per week, except when urgent repairs are in hand, in which case the inspector must have weekly details about every person so employed.

In Bengal no exempted person may work more than 40 hours' overtime in any one month. None of this protection is afforded to persons employed in a managing, supervisory, or confidential capacity and these terms can be defined to embrace a very wide range of occupations.

As a matter of fact, the great majority of factories work a ten hours' day only, and eight or nine hours are frequent in engineering and some other trades. In 1928 a census was taken of the hours of men in about 7,000 factories and of women in 5,000. It was found that 26 per cent of the men, and 31 per cent of the women, were working not more than 48 hours a week, 13 per cent of both worked between 48 and 54 hours, and 61 per cent of the men and 56 per cent of the women worked more than 54 hours. Throughout the cotton mills the ten hours' day (exclusive of rest periods) and 60 hours' week would seem to be the rule. In the jute trade the hours are less easy to compute. Where the ordinary single shift is worked the eleven hour day is often found, the mill closing one or, possibly, two hours earlier on Friday and altogether on Saturday; where the multiple shifts are in vogue, the present tendency is to work a longer day, but to close the factory on Saturday and sometimes also on Friday. Week-ends away are a common feature here of industrial life.

(d) Penalties

If the provisions of the Act are infringed or the inspector is obstructed in the discharge of his duties, occupier and manager are jointly or severally liable to a fine that may extend to 500 rupees, but is in practice often too small to act as a deterrent.[1] They may also plead that another person is the responsible party and that they have used due diligence to ensure observance of the law, or the inspector himself may decide that such is the case and proceed against whoever he considers to be the actual offender.

(e) Compensation

Very naturally the campaign against accident and disease has been greatly strengthened by the passing of the Workmen's

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[1] The average fine in Bombay in 1928 was about Rs. 24 (£1–16–0).

Compensation Act, 1923, and by the liberal interpretation often placed upon it in deciding claims, both by the inspectors and by the Special Commissioners who have charge of the administration. In addition to accidents, lead poisoning and phosphorus poisoning and their sequelæ carry the right to compensation. The provisions as to compensation for accidents seem to be well understood by the work-people and their Trade Union advisers, where such exist, but the habit of drifting away to the home villages when illness assails makes cases of industrial poisoning more difficult of detection.

Injuries resulting in partial or total disablement for more than ten days carry the right to compensation, provided the sufferer was not under the influence of drink or drugs at the time and that he did not act in wilful disobedience to a safety rule or order.

Compensation in cases of death may amount to any sum not greater than 2,500 rupees, and for total disablement the maximum is 3,500 rupees. These monies cannot be seized for debt, etc., and payment due to women or minors must be made through the Commissioner and not direct. On him also devolves the knotty task of deciding how compensation in case of death shall be divided among the dependants, a word that covers relationships from a paternal grandparent to minor grandchildren. This official is appointed by the Local Government but disputants may appeal from his decisions to the High Court, provided the sum in dispute is not less than 300 rupees.

A claim for compensation must be made as soon as possible after an accident, and in any case within six months. Unless the rules are specially varied, the notice must be served on the employer, giving full details, and before the workman has voluntarily left his employ.

If the employer offers free medical examination at a reasonable place and hour it must be accepted and women may demand a woman doctor or witness.

Other Acts closely touch the subject of industrial welfare, e.g., the Mines Act, the Trade Union Registration Act, the New Trade Disputes Act and the law regulating employment in tea-gardens. It will, however, be simpler and more clear to deal with these when we come to consider the subjects to which they especially refer.

CHAPTER III

GENERAL CONDITIONS IN THE COTTON TRADE

For some unknown reason, there seems to be an impression abroad that factory conditions in India are particularly bad. It is with a sense of surprised relief, therefore, that the visitor, accustomed to industrial sights and sounds in the older industrial countries, looks upon the spacious, well-built factories and the well-guarded machinery that are the rule and not the exception in India. The older rambling type of factory is to be found and deficiencies and abuses exist, but before launching upon a description of 'industry as she looks' let it be said at once that the equipment and conditions in the Indian factories are not strikingly below those found elsewhere. India's best is not equal to the best to be seen in England or America, but her average comes very near to theirs, being better in some respects and lower in others, and she holds her own well in the comity of nations of which she forms a part through the International Labour Office.

This must not be taken to mean that there is not ample room for reform, but it is an emphatic protest against any sweeping condemnation of Indian factory conditions. The progress that has been achieved should command our respectful admiration. There seems to be little fear at the moment that it will produce a lethargic content.

Industry in India takes, as has been said, many and diverse forms and it is well-nigh impossible to give a bird's eye view of it. We must confine ourselves, therefore, to trying to give a short series of characteristic sketches.

The mere mention of Indian industry calls up at once visions of cotton and jute, her two great staple trades; and, of these, cotton is by far the most widespread and interwoven with the whole economic life of the country.

It has already been stated that upwards of two-thirds of the factory workers of India are engaged in the cotton industry, half of them intermittently at ginning and pressing and half of them in the big mills that bid fair to increase in number in spite of trade depression and the menace of foreign competition.

India may roughly be likened to a triangle whose sides are curved, concave on the east, convex on the west. If we exclude the extreme north-west and draw a bisecting curve, following the concentric curves of the coast, and passing through Cawnpore, Nagpur, Bangalore and Madura to Tuticorin, we shall have a fair idea of the realm of King Cotton. To the left of our curve you are never far from him, to the right his sway is rare and sporadic, with the important exception of the district of Madras. Cotton districts lie over the face of the land in broad belts, wherever the black cotton soil is found, for cotton is a lucrative crop and yields good revenue ; and with her three hundred or more mills, India can still export about two-thirds of her cotton crop to other manufacturing countries. The remaining one-third she works up mainly for her own use, sometimes mixing with it longer staple cotton from the Sudan or even from America. There is a certain amount of export of manufactured goods to Africa and away to the north.

Manufacture began in the fifties of last century in Bombay, still the largest centre of the trade, and the home of seventy-nine cotton factories in 1928. For a long time spinning was the chief concern as the diligent handloom weavers were quick to realize the greater uniformity of mill-yarn, and proved good customers, while a very large overseas trade in yarn developed with the Far East. The power-loom is no novelty, but has increased enormously in numbers since the Great War and the loss of the Chinese market, and mill-made cloth has gained in popularity since the introduction of artificial silk has done much to satisfy the Indian love of colour and varied design. Saris, coatings, etc., of elaborate and traditional design continue to be made on hand looms, and this is especially true of the beautiful silk or silk and cotton cloths for which India is famous. Fine lawns and muslins come from the west and, latterly, from Japan. Plain and fancy shirtings, plain and bordered cloths for men's and women's garments, sheets and towels, tents, mattresses and counterpanes, and cheap cotton blankets, made from cotton waste, are manufactured increasingly in India. A great many fairly intricate patterns are often woven into comparatively coarse material.

Most of the cotton mills of India conform to one or other of two dominant patterns. There is the mill of two to five storeys, a long straight, narrow building, the centre projecting to make room for staircases, and each floor either continuous or divided into two similar sections. Within such a mill the conditions may be bad or good, but the general type is familiar to all who know Lancashire or New England. Very often the weaving shed is a large modern addition on the ground level and with saw-tooth roof. Another type of mill is found in, or near, smaller towns where land is cheap and consists of a series of single storey buildings. Very frequently the mill stands in a large compound which is sometimes well laid out and shaded by trees, but is very often an arid waste of which the best that can be said is that it provides breathing space.

Of course the old-fashioned rambling mill exists, a mill that has begun with a small business and expanded to meet increasing demands often where there is little legitimate space for expansion, but the difficulties of working such a mill are great, and the number tends to decrease. If it belongs to one of the big agencies working a group of mills, capital is available for re-building. If it belongs to an independent firm it will probably fail to prosper and be bought up and re-conditioned by an agency.

The cotton mills are generally solidly built of brick or stone and with stone staircases. The majority are fitted throughout with automatic sprinklers and fire-proof doors, though those precautions are less generally observed in the south. The machinery is nearly always of British make, but German, Swiss and American machines and engines are to be found, usually to suit some peculiar need or process, but sometimes invading a market that has been considered to be peculiarly British. Contrary to the American, who prides himself on his readiness to scrap old machinery, the Indian manufacturer shows with pride the dates of forty years or more back that mark his machines, and solid British engineering responds well to his demands. Still, India is also looking for new methods and new processes, and we had news of a very large order that recently went to the continent of Europe, because Northern England proved unadaptable to the peculiar needs of the factory in question.

In the older factories the machinery is frequently overcrowded and the rooms are darkened by the profusion of belting. On the other hand, some of the newer works are most generously spaced, and belting and shafting are reduced to a minimum, while here and there the underground drive and the individual motor are to be found.

The flooring is very often a weak point. It may be argued with justice that barefooted workers are unlikely to slip or to trip; but broken stones where the slabs are laid on earth do not make for cleanliness, and holes or badly mended crevices in wooden floors may be so many centres of infection. In Southern India and in some of the Cawnpore factories there is a very different standard, reminiscent of, if not equalling, the flooring in some of the best American mills.

The engine rooms are nearly always well-built, spacious and spotless. The standard of cleanliness inside the mills varies considerably. Where a fortnightly clean-up is the rule, there is time for a good deal of fluff to accumulate. Some of the mills in Bombay and Ahmedabad are the worst sinners in this respect, and one wonders how far the alleged cleaning reaches among rafters and fittings and under looms. The mills in South India, which work chiefly with short staple cotton, show that this state of things can be avoided. In Southern India, the carding machines are generally stripped with vacuum exhaust every two hours. Certain departments are notoriously difficult to keep clean, but the fact that in all parts of India one comes across 'blow-rooms', and mixing rooms that are, to use an expressive phrase from the English Midlands, 'like drawing rooms', gives ample demonstration that a high standard can be reached.

Again, the sizing of warp beams may be an exhausting occupation, the workers being constantly bathed in damp, and not always odourless, steam, in spite of special exhaust ventilation. Many managers honestly believe this to be inevitable; they have probably never seen the cased 'slashers' which render this department practically steamless and odourless, though about 60 per cent are so cased in Bombay City.

Outside Madras, artificial humidification is rarely seen in Southern India, but it is very general elsewhere and the factory inspectors pay much attention to the installations. They are by no means an unmixed evil, for cold spray is injected instead of steam when the temperature rises above a certain level.

In this connexion it must be remembered that the British worker prefers a temperature below 70° F. to one above; the Indian is aggrieved if asked to work in a temperature less than 77° F. However, there soon comes a point at which the Indian dreads the sun, and if many workrooms seem ill-lighted to British eyes, it is fair to recall that the Indian prefers too little to too much light; witness the great majority of his own dwelling places.

Many mills provide coarse curtains for the mill windows, others are experimenting with different kinds of glass, and there are several systems of roof lighting, all adopted in the hope of reducing direct sunlight and glare. In ground floor rooms the 'tunnel system' of ventilation is often used, a simple system of underground channels through which damp and cooled air is driven, the floor above being perforated in places. This method could not be used in England and it is unpopular in some parts of India, but in others it is both popular and efficacious. An increasing number of Carrier plants are being established in Bombay Presidency. This system in its modern form comes from America; it is expensive to install, although simple in its working and wonderfully successful in its results. Similar methods have been used for thirty years in Nagpur and in a few mills in Ahmedabad and Bombay. In Sholapur an enterprising manager whose roofs are built on the saw-tooth plan has jets of water playing on them. The water is drawn off by means of gutters and used again, replenished from the apparently inexhaustible mill well, and losing about 50 per cent by evaporation in the process. In one mill in Bombay, an attempt was made to increase air movement near the weavers by 'a cheap type of propeller fan driven from the loom shaft and ordinarily clamped to the loom rail,'[1] and it is reported that this simple device materially relieves the weavers.

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[1] *Annual Factory Report of the Presidency of Bombay, 1928*, p. 9.

Some of the cotton processes need a fairly high temperature, and, even in Lancashire, the thermometer may stand at 96°F. in the mule spinning room. India has many climates and no one system is likely to be equally suitable to every part of the country. Experience shows, however, that extremes can be overcome, and where management has made a determined effort we find temperatures varying between 75°F. to 95°F. at different seasons of the year, while outside they range from 70°F. or below to 120°F. The Chief Inspector for Bombay reports, in summing up conditions for 1928, that 'it has been generally realized that expenditure on ventilation and cooling apparatus means a more contented labour force, increased earning power to the operatives, and often increased profits to the concern.'[1] In the mills where little is attempted to counteract the heat it is not surprising that the men keep little trunks for their clothes under their machines and work clad only in a loin-cloth and the head-dress of their district.

One great difficulty in the way of keeping the inside of a mill decent is the common habit of spitting, rendered the more objectionable by the national habit of chewing betel nut mixed with other ingredients which stain the saliva bright red. Floors, walls and staircases bear witness to this habit, but some mills are refreshingly free. Very occasionally there is a plentiful supply of cheap spittoons, conveniently placed and their use insisted on. Sometimes there is like insistence upon the use of certain authorised 'spitting corners'. A manager of a flour mill was asked how he secured his spotless floor and he replied that if its cleanliness was sullied he did not trouble to apportion the blame but fined the section overseer two annas (twopence). Perhaps this discussion of an unsavoury subject requires an apology, but in a country in which tuberculosis is a deadly, and an increasing, menace it is not devoid of importance or even of urgency.

From the above it will be clear that it is not necessary to hold up foreign examples to Indian eyes in matters of the building and equipment of cotton mills. There is no relevance in the common answer to suggestions that 'India is different' and that success elsewhere is equally likely to be failure in

[1] ibid., p. 8.

India. She can show the best to her own sons and daughters, and even if business is slack in places and therefore improvement must be slow, the ways of advance are clear and the experiments and methods here cited have borne the tests of experience.

It is otherwise when we come to discuss the human element in the mills. Here India teems with difficulties, both national and regional, and what succeeds in one place may not have a like effect in another.

In most countries women predominate in the cotton factories. In India 77 per cent of the workers are men, 19·2 per cent are women and 3·8 per cent are boys and girls, the boys outnumbering the girls by nearly four to one.

In South India, there are usually plenty of applicants for vacancies and the European managers both select and discharge. In the north, labour must often be recruited and engagement is hence in the hands of the jobbers or maistris, a system that gives rise to many abuses that are not wholly eliminated by the more direct methods of the south.

Mohammadans predominate among the weavers. There is an increasing number of Christians in the Cawnpore mills, and in South India they may average up to 33 per cent of the workers.

Some mills employ no women at all, notably the Buckingham and Carnatic Mills in Madras. Generally women work at reeling and winding and act as sweepers, waste-pickers and occasionally as spinners, while men sometimes trespass on their domain as winders. One sometimes finds the women in dark and crowded rooms but quite often their parts of the factory are the most cheerful.

There are no children in the Bombay mills and comparatively few in Cawnpore, where women are also unpopular and only number 3 per cent of the workers. The employment of children follows the old-time lines in England. They work as doffers and later as piecers and often—low be it spoken!—appear to enjoy the work thoroughly when it is intermittent and done in groups. They must each carry a token to certify that the doctor has passed them and they must not work in two different mills on the same day, as they very frequently did as lately as 1927. One employer in Ahmedabad remarked then that if he had a compulsory half-time school he would lose all his boy labour as it would prevent this double working. Another had risked it and insisted on the school and did not appear to suffer in consequence. In Madras, where there is little opportunity for evasion of the law, the half-time schools are a great feature of the Buckingham and Carnatic Mills and the knowledge that labour is only recruited through the schools helps to keep them full.

In Ahmedabad the factory inspectors have recently conducted a campaign against the double employment of children, and a special check in 1928 satisfied them that the evil had been stamped out.

In this connexion it must be remembered that compulsory education is making very slow headway in India, and until it is widespread and firmly established children over twelve are probably safer in the factory than in unregulated employment outside; and also that India does not allow anyone under fifteen to work full-time in a factory.

Engagement is generally nominally subject to a month's notice on either side, but there are many exceptions and evasions and probably the convention is rarely observed. Probably also the burden of exception falls most hardly on the worker, for anything up to fifteen days' wages is kept in hand by the firm and some negotiation is necessary to obtain this if a man leaves suddenly. The jobber or the foreman, on the other hand, can dismiss summarily for various offences, though in many cases there is a right of appeal to the manager. Many firms also have the system of granting leave, even up to several months' duration, to enable workers to revisit their village homes, and, in these cases, the worker is unlikely to leave without permission. In view of the confusion of custom that exists for dealing with these long absences it would do much to reduce grievances if practice were stabilized for each district, a matter that is at present under negotiation in Bombay City.

In some factories sub-contracting extends from building operations to the bleaching department, often in this case carried on by old-fashioned methods in the open air, the firm providing the necessary equipment and taking no responsibility for the welfare of the workers. If they did, the old methods might have to be abandoned. Standing knee-deep in cold water may be very pleasant at some seasons in India, but under a broiling sun, or in a temperature like that of an autumn or spring morning in England, it must be a trying occupation, and an underfed Indian is very susceptible to changes of temperature outside an unusually narrow range.

Discipline is enforced by fines or dismissal and, unofficially, there is a good deal of corporal persuasion in some mills, though the Indian workman is becoming extremely sensitive on this subject and strongly resents being 'beaten', a term employed for anything from a slap to a thrashing. The latter does not occur inside the mills, but it is not unknown outside if a man has managed to offend his foreman or jobber. The fines are not as a rule excessive. Sometimes they are paid into a dispensary or other welfare fund, but there is no general rule. Difficulties about fines seem to arise most often among the weavers, who are either fined or made to buy spoilt cloth, while they often claim that the blame attaches to a previous process. A custom is growing in Bombay of reserving spoilt cloth for the periodic visits of a trade union organizer who acts as a kind of arbitrator. Taken as a whole, the Indian worker is reasonable in matters of this kind, but he wants a chance to put his case to a patient listener. Some managers think that a weaver would rather take the spoilt cloth than pay a fine, as he can recoup himself by selling it in the bazaar, but opinions are divided on this point.

In any case the Indian exercises a good deal of choice as to the discipline under which he works. More or less he concedes the employer's right to punctuality and passable work, but, over and over again, one is amazed at the extent to which Indian labour controls its own conditions. Rules there may be and are in plenty to regulate exits and entrances from and to the workrooms, but, at least in the cotton mills of the west, as an employer naïvely remarked, 'Our people take no interest in them.' One experienced manager stated that he considered that each worker put in about six hours effective work a day. Probably the average is nearer eight hours, but it cannot be much more. It is a strange sight to western eyes to enter a mill compound and to see the long lines of silent squatting figures, smoking and resting, while others are washing themselves or their clothes at the taps. Some will drift noiselessly away at the approach of a member of the staff, but many will remain motionless, apparently hoping that if they do not see him, they will escape his observation. In addition, from nine o'clock onwards, wives stream in with dinners, and the husband immediately leaves his machine and partakes of his meal with all due leisure and ceremony.

Yet the machinery works on and this continuity is secured in two ways. Firstly, nearly every mill carries up to 10 per cent extra labour to cover unexpected absences and rests, and, secondly, the workers have up to the present successfully enforced a manning of the mills that allows a man to do his neighbour's work on occasion. For instance, the operatives have a fixed idea that a man should work two looms; a visitor to a mill may see a large proportion of weavers working four looms and think that a new order has been introduced. He is mistaken ; the men are taking the places of their friends who are outside. In extenuation of this custom an Indian employer gave it as his opinion that in India no one should be expected to work more than two hours without a rest.

The eight hours' day has many advocates in India as elsewhere and is the practice in most engineering and in some other works. It has once or twice been tried in the cotton industry without success. It is a matter for careful enquiry as to whether the Indian worker prefers the longer day with his accustomed periods of slackness to shorter hours of intensive work. The western workman has long ago made up his mind on the subject. It is by no means a foregone conclusion that his eastern brother will give the same answer to the question at the moment, whatever he may do when education and a gradual raising of his standard of living have developed his interests and resources and improved his physique.

In the great majority of cotton mills wages are paid once a month, with a waiting period of 3 to 15 days, i.e., at the close of the month this so-called waiting period is required for making up the books. (It naturally also prevents a general leave-taking immediately after pay-day, as everyone has already something to lose by unauthorized slackness.) Where fortnightly wages are the rule, as happens in some Ahmedabad and Cawnpore mills, the waiting period is naturally shorter and there is a tendency everywhere to reduce it to one week if possible. A prolonged waiting period is naturally a real hardship to the newcomer. He has generally little or nothing in hand and to subsist for several weeks before the first wages are due would be a serious problem in any country. Where a mill conducts a cheap or a co-operative grain store credit is usually allowed up to a given percentage of the expected wages. Some mills give advances to be repaid by deductions from wages, sometimes at no interest, and, in any case, at a less rate than would be charged by the ubiquitous money-lender outside or by the foreman or jobber inside. Occasionally there are small bonuses which can be earned above the standing wage and these may be paid weekly, or even daily, instead of being left to accrue to the monthly total.

When we come to the question of the actual wages paid, it is difficult to generalize, and anything said here must be considered in relation to the fact that standardization of wages is at present under negotiation in Bombay. Roughly speaking, then, a weaver in Bombay or Ahmedabad who works on an average his full 26 days a month earns from 35 to 60 rupees a month (£2-12-6 to £5-5-0 or $12.65 to $25.25). In some mills he may earn up to 70 rupees or even more, in others his average may be nearer 30. In Sholapur he rarely gets more than 35 rupees in cash and the Cawnpore average is distinctly lower than in Bombay.

In Southern India the weavers are said to earn 30 to 35 rupees, except in the Buckingham and Carnatic Mills in Madras, where they earn from 36 rupees. Spinners range from 18 to 30 rupees a month, and the average probably lies between 20 and 25 rupees in the north and 15 and 20 rupees in the south, with, it is to be feared, an inclination towards the lower figures.

Women coolies and waste-pickers earn 8 to 10 rupees, reelers and winders 18 to 22 rupees in the north, sometimes getting more, and, in the south, generally considerably less. Many of them are bad time-keepers, which may considerably reduce the apparent average in any one mill. In Madura they had 4 annas (4*d.* or 8 cents) a day and could earn up to 8 annas, but this was rarely accomplished.

As soon as we come to discuss this question of women's wages, we are met, in the east as in the west, by the hoary argument that women do not need, or even should not claim, high wages because they have only themselves to keep and a man presumably supports a family. It is interesting to see how this argument works out in India. At first sight it appears more plausible than in the west. Bachelors are rare and, owing to the common system of joint households, a man is more liable in the east to have a crowd of dependants, even if most of them may help to swell the family income. Again, this joint system gives an assurance of shelter to many women who, in the west, would have to be self-dependent or else seek the help of public or charitable assistance. But India is proud of the fact that she has no poor law.

Enquiry has, however, revealed that if the proportion of self-dependent women is small, the number is not negligible. In a recent investigation in Sholapur it was found that, out of 462 women mill-workers whose circumstances were inquired into, 80 or 16·6 per cent were responsible for dependants as well as for themselves. Again, among 378 women mill workers in the Central Provinces, 91 or 24 per cent were found to be self-dependent and 20 of them, or rather more than one-fifth, had dependants.[1] Even if it can be claimed that the slenderness of these figures gives no authority for an easy generalization, it can at least be said in reply that easy generalizations on the other side must not always be allowed to mask a problem that evidently exists and that ought to be met in a civilized country; whether by a general rise in women's wages or by some system of public allowances it is for India to decide. In this connexion it is fair to remind our readers that, when men and women work side by side on the same job, their piece rates are usually the same. In such cases, if the men earn more it may be due to their greater skill, strength or better time-keeping, but it is probably at least partly due to the fact that the majority of the women have to bear the double strain of house and factory work. In Sholapur, this was found to be the case with 92 per cent of the women interviewed and, among the group in the Central Provinces, far more than half (63 per cent) had no relatives to help with their housework (which is made the more arduous by the need to fetch water and often to wait for a chance to draw it), not to speak of other customs which increase the burden on the Indian housewife in spite of the apparent simplicity of her home. Special women or fore-women are often said to earn 30 to 35 rupees, and jobbers and head mechanics earn 100 to 120 rupees and a good deal more besides, if half the stories told are true.

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[1] Refer to Appendices II and V.

Even with these occasional high wages, the rates of pay must appear startlingly low to western eyes, though the differences between the districts are reduced by the differences in rent. A report on the cost of living in Madras recently suggested 23 rupees a month as the minimum for a reasonable family existence.

That should be translated into 27 to 30 rupees for Bombay and little less for Ahmedabad. Even if one takes into consideration the necessarily higher standard of living under western climatic conditions and the fact that it is very generally considered that it takes three Indians to do the work of one English worker in the cotton trade, to claim that each of these three adult male Indians should earn the equivalent of 8/7½*d.* a week does not seem an extravagant demand, or one that would satisfy the western worker. It is, however, one thing to fulminate against low wages and another to raise them. Some Bombay mill-owners say that they aim at reaching the 30 rupees minimum for adult males, and it is unfortunately true that the 15 rupees so common in the south is still better than the district wage in agriculture or most home industries. The whole question is complicated and, in many trades, difficult of solution. Meanwhile the vicious circle rolls on, underfed and under-housed people show sub-normal mental development and produce under-standard work.

One of the great and outstanding difficulties connected with Indian industry is the housing of the workers. Even in the southern states of America, where a cotton mill employs only 300 to 600 workers, it has been often found necessary to gather them into a mill village from the sparsely populated countryside. Where there are only one to three mills in or near an Indian city they may be near enough to a sufficient labour supply to take no thought for housing. But even in these cases it has often been found necessary to provide some accommodation, and in Bombay, where land is scarce, a terrible condition of affairs has grown up, although several of the mills house a proportion of the workers in their own chawls or tenements, and in spite of Government and municipal efforts.

A great many strictures have been passed upon Indian housing conditions. Even allowing for the fact that the most reliable trade union leaders admit some improvement in recent years, the new-comer carries away the impression that nothing has been said that is too strong for the facts, as far as some of the private chawls are concerned. This is especially true in Bombay, where land is exceedingly valuable and the people live in gloomy tenements, often four or five storeys high, with primitive sanitation, rambling passages and stairways from floor to floor that are little better than ladders. Up under the roof on the topmost storey, an adult may not be able to stand upright, and many rooms have little or no natural light. Some of the one-storey chawls are little better, but they may have a verandah that serves as a kind of overflow room and stable.

One-roomed dwellings are the rule in most Indian working-class quarters, but it was surprising even in Bombay to find four families living in the four corners of a room, while a fifth found accommodation on a high table which turned one corner into a two-storey dwelling.

If the chawl or tenement system must persist, and there seems to be little hope of escape from it in Bombay, the blocks of dwellings built by both the Government and the municipality are probably as decent as anything of the kind can be. Unfortunately, the largest of their schemes is in a newly developed area where cheap means of transport are not easily available. Also, the size of the blocks and the area in which they stand seems to frighten the people and up to the present, the majority stand empty. The provision of open space and the growing trees should make the district attractive in time to come, but some kind of mass movement will probably be necessary before the blocks house anything like their full complement of tenants. The high rents were at first a difficulty but these have been reduced and it is to be hoped that some of the appalling chawls in Bombay may some day be forced to yield up their inmates.

In this connexion, mention should be made of the very attractive one-storey dwellings provided for port and gas workers and also of one set of mill chawls built on the same lines close to the sea by one of the mill companies.

A recent visitor to Bombay has commented on the numbers of homeless men whom he saw sleeping in the streets. The men are there on every ledge, across the pavements and even in the roads, but they are not necessarily homeless—they are seeking relief from their stifling and overcrowded homes. In Cawnpore and parts of Madras conditions are equally bad, except that in these cities there are no tenements of several storeys. If possible, however, drainage and provision of water are worse.

It is often claimed that the people fare no better in their own villages, and certainly many of them are accustomed to exceedingly primitive conditions in their old homes Still, there is space all around, and the air that blows through lath or grass walls may be pure; mud walls are easily repaired and the village rest-house or similar building gives the men a convenient sleeping out place at night.

The mill chawls in Bombay may leave much to be desired but at least they are better and usually somewhat cheaper than the accommodation outside. Very commonly they consist of blocks of dwellings, four or five storeys high, with a central corridor lighted at each end, into which the rooms open on either side. At the back of the rooms a section is wholly or partly screened off to form a verandah, one side being used for cooking and the other as a washing place. Sometimes this section has a kind of false roof, which affords an enlarged shelf or storage place for firewood, blankets, spare clothing, etc., etc. Household goods, other than cooking utensils, are stored in the padlocked trunks and a string suspended across one corner holds the family bedding. The absence of furniture is probably a blessing in disguise, and floor and cooking pots belie the general appearance of dinginess and squalor for they at least are clean. The presence of a hammock chair, of a bed or clocks and pictures usually betokens a Christian or a poor Anglo-Indian family. If there were more whitewash and if a substitute could be found for the dirty sacking with which the housewife screens herself from sun and cold, some of these chawls might be passable, if not admirable, particularly if we remember that they are probably a necessary evil at present. Where there are several blocks, the compound gives space for children to play and for men to sleep, the women using the corridors in the very hot weather.

The Bombay mills charge rents varying from two to six rupees a month for their dwellings and practically all lose money on them. Sometimes they are under the control of a manager, sometimes of the mill doctor.

Outside Bombay, chawls usually take the form of 'lines', i.e. rows of six to fifteen single room dwellings opening on to a verandah, generally partitioned from the neighbours and often screened in front. Too often the rooms are back to back, but advanced employers build them in single lines with a through draught—an advantage not always obvious to the inmates.

A more detailed discussion of industrial housing will be found later. The whole subject bristles with difficulties. It would be unfair to impose a costly standard on the mill owners in districts where the municipality allows the private owner to go his own sweet, or rather unsavoury, way. There is no need, however, for the great variation that exists at present, and it would be well if employers could agree on a certain minimum of conveniences, say, a partitioned and partly screened verandah to each house in lines, a waste pipe to each dwelling, proximity to water supply and refuse dump, and some kind of shelf or storage place, even if it be only a cavity in a mud wall. The question of roofing demands careful research. Corrugated iron is vermin-proof and cools down rapidly at night but is unsuitable for the family during the day. Thatch is cheap and cool, but it is inflammable, constantly in need of repair, and may harbour vermin. Tiles are used in many places and have great advantages, but are difficult to keep in order where monkeys abound. One cheap and non-conducting roof was formed by laying sheets of second-hand corrugated iron as a ceiling over the house; on this was a three inch layer of the simple cement or worked mud in use in the district; corrugated metal above, sloped as usual, completed an inexpensive and durable roof that secured a very fair measure of comfort to the inmates.

A special chapter of this section is devoted to a description of some of the best conditions and welfare organizations to be found in India. Let it therefore suffice to mention here only a few points that are part of the general organization of the cotton trade.

With few exceptions all mills provide a dispensary and dressing station, where a compounder or a dresser is always on duty and where a doctor attends at stated hours if the business is not large enough to admit of a full-time appointment. In Bombay Presidency and Cawnpore, there is practically always free treatment for the wives, children and, often, other relatives of the workers, while some mills go further and treat all who come. A great many mill doctors assert that their services are not sufficiently utilized, and the men on their side complain that the doctors are inefficient and inattentive and the medicines of poor quality. A great deal must be allowed for ignorance and superstition, a preference for quack medicines and desire for quick alleviation of symptoms rather than for a radical cure, the necessity for which is not always apparent to the sufferer. Some of the mill doctors are enthusiasts and real missionaries of the gospel of health, but it is quite possible that the complaints of discourtesy and inattention are not always unjustified and that some compounders prove unable to resist the opportunity of making illicit charges for the medicines that they dispense. It is rather a sad reflection that the result of putting a European at the head of the medical staff of a large group of jute mills in Bengal was to more than double the attendance, the increase being so great that small fees had to be instituted for outsiders in order to keep the work within bounds.

The Bombay Council have recently enacted that all factories shall give maternity benefits to their women employees. A few have anticipated this requirement and make an allowance of average or half wages for a period varying from one to two months to women who have been on the pay list for ten to twelve months. Compulsion is, however, strongly resented, and if such a law became general it might for a time prove detrimental to the employment of women, especially in the south, where what might be called ‘ the welfare sense ’ is somewhat elementary, apart from the provision of decent accommodation and a wage rather higher than other trades in the neighbourhood (and still lamentably low!)

Crèches have made greater progress and are a popular method of starting welfare provision, especially in Bombay Presidency where the one woman inspector in all India has made maternal and child welfare her chief concern.

In Bombay itself there are now fourteen crèches, with an average total attendance of about 300, and records for 1928 show that they have been instrumental in rescuing 102 babies from opium pills. Occasionally separate accommodation has to be provided for the outcaste babies, but this was in no case dissimilar to that provided for those of higher rank. Some of these crèches are primitive in the extreme, but the standard is slowly rising. They are all apt to be more used by toddlers and older children than for the tiny babies, and a few mills have realized this and added nursery schools, a most necessary addition. During part of the long strike in Bombay in 1928, a few of these crèches were kept open, and in one month six crèches reported a total average attendance of 124. Ahmedabad employers maintain thirty crèches, though a few are primitive and they are apt to overcrowd the babies, a mistake easy to make when the local method is simply to sling a hammock on a rod; but one or two of the nicest crèches in India are to be found in this city. Two especially run along two sides of shady little gardens and have rooms and provision for babies, toddlers and nursery schools. Another very charming example was found in Sholapur, where some of the mills also maintain schools.

It is often urged that mothers will not make use of the crèches, but patience and encouragement usually overcome their reluctance after a time. Mill crèches do not, however, cover the problem, for a great many women work outside the mills and their need is even more urgent. Only in Ahmedabad, Sholapur and Madura did we find thought taken by outside societies for the needs of these coolie women, in the former place through the activity of the local branch of the Bombay Council of Women.

A few mills make provision for dining. Sometimes this is a raised platform, or a large shed with partitions for the different castes. A delightful plan is followed in connexion with the Tata Mills at Nagpur, where a number of small creeper-covered shelters are provided in a large garden. When we come to consider welfare in its more developed forms it will be apparent that in India the cotton industry has led the way and not been a late-comer in the field, as has been the case in England and America. With one or two outstanding exceptions it may seem to be a matter of very small beginnings, but in Bombay at least, the industry has been, and is, labouring under exceptional difficulties in the face of which more is being done for the people than in some prosperous trades and districts.

Before leaving the subject of cotton something should be said of conditions in the so-called Native States. Industrial legislation may be practically non-existent, as in Gwalior; nominally at least more stringent than in British India, as in Baroda; or similar to British India but about two years later in arriving, as was said by an official in Mysore. There are important groups of mills in Baroda, Indore and Ujjain, and scattered ones in other places. Much of the cotton is also grown under the Indian princes, and when one realizes how easy it is to move a business from a strict control to a lenient one, the necessity of a general levelling up of conditions becomes apparent. A similar situation in the United States has thrown many people out of work in Massachusetts, where the industrial laws are unusually strict, while new mills and villages are being built south of 'the Dixie line' in states where less control is exercised.

In Mysore the ten hours' day is enforced, but half-timers may start to work in the mills at the age of eleven, working not more than seven hours a day. The regulations regarding health and safety and rest and holidays are practically the same as those in British India. Two of the Bangalore mills and one outside Mysore City are fairly new one-storey buildings in pleasant surroundings and well-arranged inside. In two of these cases the mill housing promises to be well above the average. In the Bangalore mill only a beginning has been made but the houses are of an improved pattern. They have a verandah in front, and a half-verandah behind, the other half being roofed and walled to allow of cooking outside the living room. Shelves are also provided and as the settlement has been started on hilly and broken ground, long uniform 'lines' will be an impossibility.

In Baroda it was difficult to get exact information on legal points but half-timers seem to be between ten and thirteen years of age and compulsory half-time schooling must be provided by the mill. The schools are elementary in more senses than one, but when they were visited about half the children on the mill books were in them except in one instance. Apparently the hours of work vary with the seasons and can be extended to thirteen at busy times, eleven hours with thirty to forty-five minutes' break being the usual working day. All the mills visited here were well-built and in most respects well-arranged, although they had not the progressive features of some of the best mills elsewhere.

In Indore there is a factory act but no one seems to know much about it and the type-written copy promised by the Director of Industries did not materialize. Here the cotton arrives in country carts, and is weighed in and piled up like miniature snow-mountains in the yard. Spinners seem to earn about 20 rupees a month, weavers about 40 and women about 18. In the newest of the mills there were very wide passage ways between the looms and the rooms were large and light. The ten hours' day seems to prevail in this district.

Ujjain, near Indore, and in Gwalior State, boasts of being the second oldest, if not the oldest, city in India and contains some of the oldest mills and has, apparently, no factory act. Hours are eleven, twelve and thirteen according to season and daylight and there is only half an hour free at mid-day. The children are said to be all over eleven and to work only about eight hours, but no proof was furnished of either statement and certainly the first was not entirely obvious. Everything is free and easy, arrangement and fencing included. The management is entirely Indian. In at least one of the mills groups of peasants wander through at their own sweet will, apparently 'doing' one of the sights of the town.

Taken as a whole, the standard in the Native States is hardly equal to that insisted on in British India and in some ways it is markedly lower. On the other hand, in States like Mysore and Baroda, there is a great ambition to show what the Princes can achieve and this helps to ensure good conditions.

Any deviation from the legal standard set in British India is naturally a menace to the country as a whole and, in some places, there is just enough of such deviation to act as a curb to progress elsewhere.

The great allied industry of ginning and pressing is sometimes a department of a factory but is more usually an independent business, often carried on in or near a small town, and only working for a few months or even weeks in the year. The majority of the workers are women and they squat on a long bench against the wall amongst the piles of cotton which they feed into the gins at their feet, regulating its flow with a small stick, to prevent clogging. The vibration of the gins separates the seeds from the fibre, letting them fall through a grating while the fibre billows out on the floor and, too often, the dust rises in clouds about the workers. Hours are long; noise and heat can be terrific. The gins are worked from below, the belting passing up through the floor to each individual machine. The rule is that this belting and fly-wheel be guarded, a rule generally observed for the belting and often ignored for the flywheel, over which the loosely clothed women too frequently climb to reach their seats. The pressing and baling is not undertaken in every factory and is a man's job and usually worked by contract and with great skill. There must be great numbers of small concerns that are outside the scope of the acts. Anyway, the provisions as to overtime can be applied in generous measure to this trade, although Bombay has never exempted ginning factories from the sixty-hour week and the Punjab cut out the exemptions in 1928. Long hours, heat and dust would be a perilous combination to earn the four or five annas a day usually paid to women workers were it not for the merciful shortness of the season.

Outside, in many districts the women and girls sit among the heaps of kapas (new cotton) picking out the damaged pods, while the birds hover round eating the grubs that are a sore menace to the crop. If an unexpected shower comes on, huge tarpaulins cover as much of the cotton as cannot be hastily transported into sheds.

Sometimes ginning is combined with seed-crushing or rice-milling, and occasionally one finds three or four trades carried on under one roof in order to utilize more fully the small power plant.

Here and there in India, notably in Cawnpore and outside

Bombay, are to be found large woollen mills turning out blankets, shawls and rugs. Naturally some of the processes are peculiar to the material used, but the conditions did not differ materially from those obtaining in other textile trades and do not call for detailed description.

CHAPTER IV

GENERAL CONDITIONS IN THE JUTE INDUSTRY

THE jute industry, the second great staple trade of India, is confined almost entirely to Bengal and links Calcutta with its sunshine and tropical heat to the grey northern city of Dundee, whence it draws many of its mill managers and departmental heads.

Jute is grown in the damp and easily flooded lowlands of Bengal and much of it is pressed and baled up country, though there are several large and very active jute presses in Calcutta. About half the jute crop is exported, mostly to feed the Dundee mills. The other half is spun into yarn, woven into hessian or made into sacks in the mills near Calcutta, destined both for use in India and for export to America and elsewhere. There is little foreign competition and the industry seems to flourish and generally to escape the fluctuations and difficulties that harass the cotton trade in Western India.

There are 86 jute mills in Bengal and 110 presses. There is little diversity in the mills themselves. Nearly all are a deep creamy colour and stand near the Hooghly. They are huge straight-lined one-story buildings standing in trim and spacious compounds with long lines of godowns or store-houses parallel with one side of each mill. Most cotton mills provide quarters for some of the managing staff. Most of the jute mills are miles away from the city and as they often employ fourteen to eighteen Europeans, who may be accompanied by their wives and families, extensive accommodation is necessary, as well as gardens, tennis courts and often a club house with billiard room and library. All this tends to give the jute mill a green and pleasant setting and often, seen from or across the river, a distinctly picturesque effect.

The interior of the mill is one huge square room, into which the raw material enters at one side, going out in finished form and baled for transit at the other. The irregular rooms, unexpected steps, passages and divisions which give a rambling character to some of the old mills in Dundee are practically unknown in Bengal. The air is full of dust in parts, but it might be worse and the whole mill is kept very fairly clean. In places the long rows of machinery seem rather near together, but this facilitates the work by saving carrying. Further on, where goods are calendered and baled and sacks are made there is more space and calm. The massive machinery is generally well guarded, the floors are well paved, ventilation and lighting are very fair and although no special precautions are taken, the temperature is said not to rise above 96°F. in the hot weather even if it is a good deal higher outside. In this great space there are probably between 3,000 and 5,000 men, women and children at work. Proportions vary from mill to mill, but taking the industry as a whole, about 78 per cent of the workers are men, and about 16 per cent are adult and often elderly women. Among the children, boys outnumber the girls by seventeen to one. They are employed exclusively in the spinning section, changing the bobbins as they do in the cotton mills. But they are not the only children in the place. Nothing is more surprising to the visitor on entering the mill than the sight of tiny brown children, often entirely unclad, darting about in all directions. Some of them are pursued by older children who hoist them upon one hip and scuttle with them to a place of hiding. Others crowd round, full of curiosity. One infant lies asleep in the heap of jute from which the mother feeds the breaker, another rests on his mother's left arm while she works with her right, and the next moment one almost stumbles over a sleeping baby laid to rest on a coat or a sack irrespective of the number of people who pass to and fro.

As one penetrates through the further rows of machines from the cards to the looms the women and their babies vanish, only to be found again at the extreme further side of the building where the women are finishing off the sacks that have been machined by the men. Here there is no dangerous machinery into which children can pry,[1] the air is almost free from dust and the piles of sacks make pleasant couches.

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[1] The word children refers in this paragraph to infants and unemployable children only.

Some reformers suggest that the presence of children in the mills should be prohibited.

Up to the end of the weaving department the air is apt to become very dusty, especially in the earlier stages of manufacture where the women are chiefly employed and where, in consequence, the small children are most apt to congregate. It may be claimed that the dust in the lines or the bazaar is equally, if not more, harmful and that to exclude the children would be to increase the danger of opium-drugging. There are, however, disadvantages and dangers in the present practice.

One of the chief is the way in which the very tiny children are laid to sleep on the floor, exactly where the air is most easily fouled in any place and where the constant passing and repassing keeps the worst of the dust in continual motion. If some kind of portable frame for hammocks could be devised, such as is frequently used by the Gujerati peasants, or if simple frames or hammocks could be suspended from some of the pillars and the women taught to use them, one of the worst features of the situation would be relieved until such time as the education of both people and managers had led them to evolve a more suitable arrangement.

There have been one or two attempts to establish crèches in the past but these have not been successful and, naturally, differences of race, language and religion make progress slow; but the diversities are not greater than on the Bombay side where the crèche is making steady progress. The problem of the older infants is, however, more serious. In 1928, there were four fatal and three serious accidents to children in jute mills and, during the previous year, two children lost their lives and three were seriously hurt. The machinery is not the chief danger. The compound is, if anything, more perilous than the mill. Indian children are extraordinarily fleet of foot and they will dart about the mill premises like streaks of lightning. Railway wagons and trolleys are perhaps the greatest sources of danger and one against which it is almost impossible to guard, while the natural love of climbing and exploring was also responsible for fatalities. It may, of course, be argued that quite as large a number of children would have suffered if left without supervision outside the compound during working hours. It may even be true that they are safer near their parents and among the work-people and managers and that there would be serious trouble if they were excluded. One wonders whether the mothers themselves might not with advantage be called into consultation. These recurring accidents, even if comparatively few in number, are very distressing, and, while not urging hasty or even uniform action, it does seem urgent that some scheme should be evolved that shall safeguard the health and safety of the children while paving the way for crèches and nursery schools in the not too far distant future.

On the question of children in jute mills, Miss Iris Wingate and Mr. R. Manohar Lall write:

'The jute industry, unlike the cotton, allows mothers to bring their infants and young children into the mills with them. At the end of the mill where the finishing is done and the women are engaged in sewing sacks, there is little machinery, and the air is comparatively free from dust and noise. The larger number of women, however, are to be found tending the machines during the earlier process, which are the most dusty of all and where the noise is great and the machinery extensive. Here babies are found lying on bobbins, on the jute, on the floor even, covered from head to foot with jute fluff which they are breathing in with every breath. The figures of the *Factory Report* bear witness to the fact that there is also actual danger to life from accidents. Several employers stated that crèches were a failure and not used. This is only to be expected as long as the babies are allowed to be taken into the mill. The women have naturally a strong tendency to keep their children near them, wherever they may be, and the jute workers are too ignorant to realize the danger to health incurred.

'Since the cotton industry has, for a long time now, prohibited children in mills it seems time that the jute industry should no longer lag behind. Once the babies are forbidden in the mills, it is probable the crèches will be well used. It might well be made obligatory for large employers of female labour in the jute trade to provide crèches for the children of their workers as soon as the order prohibiting them in the mills has been passed.

'This is a matter which needs the serious attention of those who have the welfare of the next generation at heart.'

Most of the labour in the jute mills is recruited by the sirdars or foremen, but one sometimes finds the practice of direct engagement or discharge by the management. Mill work is not popular with the average Bengali and a great many workers come from a distance.

Occasionally, however, the majority belong to the locality, many being collected in the morning and taken home at night by the company's own boats. One manager stated that 75 per cent of his people went off to their village homes every week end. There are a fair number of Madrassis among the lower grades of labour and at least one school has three parallel divisions to accommodate the Bengali, Urdu and Telugu speaking children respectively.

The general practice seems to be to work long hours on a few days of the week. Frequently the hours are from 5.30 to 11 a.m. with a long noon-tide rest, and again from 1.30 to 7 p.m. except on Fridays when the afternoon session is from 12 to 5 p.m. Saturday is a holiday. In half of these factories, however, the multiple shift obtains, which means that the people work in overlapping sections, thus keeping the machinery continuously running during the thirteen and a half hours that the factory is open. Under this arrangement the factory is often closed both on Friday and Saturday, a convenient enough practice for men whose home and land are within reach, but not very suitable for the so-called permanent workers. The chief difficulty of the multiple shift is, however, the ease with which regulations about hours can be evaded and both adults and children made, or perhaps allowed, to work in excess of the legal limits, especially where there are two or three mills in the same compound. Accurate keeping of registers, never easy to enforce, becomes a complicated business under the multiple shift system, when errors or evasions are easy to make and difficult to detect by the managers themselves quite as much as by the inspectors. Facilities are sometimes provided for bathing, but taken as a whole, both miscellaneous taking of meals and long rest pauses are much less prevalent than in the cotton industry.

Wages are generally paid weekly. They are somewhat lower than in the cotton trade of Western India, but rents are also considerably lower for Bengal lines than for Bombay chawls. Head sirdars or foremen may earn anything from 27 to 74 rupees a month, averaging 38 rupees (£2-17-0 or $14). Assistant or line sirdars take from 17 rupees 10 annas to 32 rupees 8 annas, averaging 24 rupees (£1-16-0 or $9) and male operatives 20 rupees, earning from 11 to 32 rupees a month. Male coolies average 15 rupees, varying from 13 to 25 rupees according to their department.

These figures take no account of the weaving and engineering sections, which always seem somewhat apart from the general consideration of the mill. The head weaving sirdar earns about 85 rupees, his assistants about 40 and the weavers between 30 and 35 rupees.

The head maistri (foreman) of the engine staff gets between 80 and 95 rupees and his electrical assistant about 82 rupees and the other men earn from 30 to 58 rupees, and the coolies about 20 rupees. In the workshops the wages are very similar. In one mill, where the wages are at least above the average, there is a bonus on production which usually yields an extra month's salary a year to everyone from the manager to the sweeper.

The women work almost exclusively in the batching and preparing departments and as sack sewers. Their wages range between 11 and 16 rupees and average just over 12 rupees, those classed as sweepers and coolies being on much the same level. The striking differences between men's and women's wages are much more departmental than sex-differences, for it is precisely where men work alongside of women that their wages are the lowest. The half-time children earn about 7 rupees a month.

It is sometimes claimed in defence of the multiple shift system that the people prefer it because they can earn more. A comparison of monthly averages on multiple and single shifts in 105 different sections of work fails to substantiate this claim except among the engine staff, where three sections earned slightly more on multiple shift, five earned the same under either system and the headmen lost up to 16 rupees on single shift, a very serious matter. In the workshops the single shift carpenters show a gain of eight rupees, seven sets of workers are unchanged and the remaining seven show a slight increase. In the other 78 divisions of the industry we find one loss of three rupees and one or two annas and all the rest do better on the single shift. True, in some cases the difference is only one of a few annas or one rupee, but it is generally rather more and may run up to eight or nine rupees. The children gain only an anna a week, but the women gain in every case, sometimes by more than two rupees a month and, on an average, by a rupee and a half, which is by no means negligible when such very small total sums are in question. Indeed, the great majority of the wage rates look pitiably small compared with European standards, but there are branch post offices on many of the mill compounds, and often enough half the money paid out on wage day goes off next day by post to the near and far village homes. This may perhaps be fairly cited as a proof that the people are not actually being paid on a starvation basis. It cannot fairly be used as a proof of a reasonable standard of wages, especially when it is remembered that large numbers of the men have left their families at home and must therefore support them from a distance.

Against the comparatively low wages prevalent in the jute industry must be set the quarters that are provided for a large proportion, though by no means all of the workers. Rent is generally less than a rupee a month and may be as low as four annas; the streets between the lines are paved, lighted and cleaned, and there is good provision of water and bathing facilities. There is frequently some provision for schooling and, if there is a bazaar on the mill ground, both the quality and the price of the goods sold are controlled by the management in the interests of their work-people.

The difficulty is that those who do not live in the lines have no compensation and very often live under most sordid conditions. Most of the lines also leave much to be desired. They are generally soundly built, weatherproof and sanitary as such things go in India, but the visitor may make an honest effort to appreciate all these advantages and is left sighing, 'Oh, for a spark of imagination among the builders.' Left to himself, the Indian peasant who migrates to the banks of the Hooghly may build a thatched mud hut with a glorious disregard of sanitation and infection, but he secures privacy for his family, his wife need not cook in their one room, and he has a place where he can sit and smoke with his friends, be it village rest-house or the shade of a tree. Most of the mill quarters are simply lines of rooms opening on to a common and unpartitioned verandah. Sometimes they are in two-storied buildings, an arrangement that may be necessary in some cases; but nowhere is there any privacy. Partitioned and screened verandahs at least give an extra room and a cooking place, trees might be encouraged in parts of a compound, the lines might be arranged to leave space for rest and recreation and at small additional cost the people would receive something that was not noticeably inferior to their own standard of life. To the Bengali peasant a sound roof and a paved road do not represent civilization; he may learn to appreciate these and other strange blessings foisted upon him by his white employer, but his wife wants a little privacy for her cooking and household affairs just as much as does her English sister, and even the tumble-down and expensive hut outside the lines may provide this and therefore be preferable to their trim respectability!

Free medical attention for workers and their families is the general rule and three mills employ highly qualified ladies who are enthusiastic workers in the cause of maternal and infant welfare, in spite of the many hindrances placed in their way by superstition and ignorance.

One mill has recently opened an eye dispensary, fitted with the latest surgical instruments and administered by a qualified doctor. This will serve, not the mill only, but the whole district and may possibly inculcate a branch of hygienic care which is notoriously and disastrously lacking in most parts of India.

Another large firm maintains a medical staff consisting of a European physician and surgeon-in-charge, five qualified Indian doctors, a European nurse, an Indian midwife, two dispensers and ten departmental assistants. The Chief Inspector adds: 'The medical relief and attention obtainable by the employees of this company has no equal in the province, and, it would be safe to say, no superior in any industrial concern in India. . . . Expert medical and surgical treatment of almost every form is available to all-comers free of charge.'

A few mills grant gratuities or pensions for long service and one occasionally finds arrangements for maternity benefit, hospital accommodation or sports. A cotton mill in the vicinity is arranging free cinematograph shows on Saturdays and Sundays in the hope of providing a counter attraction to the allurement of alcohol.

Taken as a whole, the situation is more peaceful than in the cotton trade and one hears few complaints of shortage of labour. The jute industry, moreover, is not beset by financial difficulty and has a wonderful opportunity, that is not being utilized, to plan concerted action and to raise the working conditions beyond the requirements of law and a general, if unimaginative, sense of justice.

CHAPTER V

GLIMPSES OF VARIOUS INDUSTRIES

A GROWING and increasingly important industry in India is engineering in its many branches.

Upwards of three hundred thousand, or nearly one-fifth of the workers subject to the Indian Factories Act, are employed in various branches of engineering, here used to include all workers in metals and minerals. More than a half of these are engaged in the railway workshops and the railways are important customers of many private firms of every size and type, from the great Tatanagar to the Mission training school. They are probably the pioneers of engineering enterprise in India and naturally include examples of old and new equipment. Judging by the reports of certain of the inspectors and by the new works visited at Golden Rock, near Trichinopoly, some of the newer shops are among the finest examples of their class, and the Golden Rock housing scheme is under the charge of a special officer and the directors aim at making it one of the best in India.

Railway workshops were, however, expressly excluded from the present survey, and, in view of the difficulty of treating of engineering apart from its larger part, only a short and partial description can be attempted here.

Excluding, then, the railway workshops, the heavy metal trades are chiefly situated in south-west Bengal or just over the border of Bihar and Orissa. In addition, many of the mills have their own tool or machine shops; and one jute mill, the Angus, has a complete plant capable of turning out everything required to furnish a jute mill. The Burma-Shell Oil Company has also a very finely equipped factory near Calcutta for the manufacture of oil containers for all their branches in the far east.

At Tatanagar, Kulti and Kumardhubi, where heavy work is done, there are enormous shed workshops, repeated on a smaller scale in every part of India where smaller metal work is undertaken, generally for a local market. The smaller the works, the more likely one is to find darkness, overcrowding or a haphazard arrangement of quite good machinery. In the great works, bigger issues are at stake and the risks are greater and so are the accidents. However, some of these works are comparatively young and efforts are made to improve on the customs and accommodation of the older trades. Perhaps the best way to give an idea of this growing industry will be to cull a few extracts from the notes of the moment.

At the first works there are said to be about 3,000 workmen and the plant is on the American model, making great use of automatic machinery. The living quarters are set in little groups of short lines on a wide and breezy expanse. The oldest are back-to-back rooms with a common verandah. More recent ones have a through draught, a ventilated and screened verandah, and air space between wall and roof, and a raised fireplace in the verandah. Foremen and artisans have double quarters with small front verandahs and tiny private yards behind. Departmental foremen have charming little houses set in gardens and the clerks have still more space. All quarters are free. The ordinary workmen seem to earn from fifteen annas (one shilling and three pence) to one rupee four annas (one shilling and ten pence) a day.

A few miles distant is a works hospital, like many another on tea gardens and elsewhere, but extra whitewash and bright chintz covers give it a very different aspect. The English matron laughingly explained that most preconceived notions 'have to go by the board'. Relatives come and go as they will and patients do pretty much as they like, but both the hospital and the medical service of the firm seem to be growing in popularity. A long walk was taken through the foundries, but omitting the blast furnaces and coke ovens. Altogether about 15,000 men are employed, working in three shifts. Large pillars, railway sleepers, etc., are cast. The place is a maze of huge tin-roofed sheds, odd railway lines, warm tanks, stores, etc. The shops are vast and murky and one feels that Dante could have culled many illustrations in the heat and the gloom. Not that there is wanton badness or oppression. The place is as other places, only the impression is intensified by the great scale, the dust and the heat.

A good deal of land belongs to this company, but it is difficult to see at a glance where the local village ends and their houses begin. The older of these are exactly like the village ones, only a degree in advance, and efforts are made to keep the surroundings sanitary. The houses have private yards and outhouses. Most of the workers come from neighbouring villages. There are some more orthodox lines, well arranged save for a few of the dread old type, i.e. a row of rooms opening on to a common verandah. There is a charming high school near the works, occupied alternately by boys and girls and there are Mohammadan and Hindu schools in the little town. Houses are free, but wages are low, i.e. one rupee a day for men and six annas for the women coolies. A few of the upper grade men get two, or even three, rupees.

Three miles further on was another works, employing about 3,000 workers and comprising a foundry, a steel mill and a silica works or pottery. Here they make some of the biggest castings and build some of the biggest bridges in India. The managers, both here and at the last works described, hold that the Indian people work to a certain standard of comfort and that high wages only demoralize them. Both managers consider that it takes from three to five Indians, according to the department, to do the work of one workman in England. It is quite probable that the actual labour cost per unit of work accomplished is little, if any, lower than in England, but coal is ten shillings a ton, though railway freights are high. In this last works the shops are lighter and cleaner. There is much elasticity about hours, but legal restrictions are not always to the liking of men themselves. They were certainly working with a will and often with great skill and with less air of weariness than in some of the departments of the other works.

The steel mill works two twelve-hour shifts, but each shift carries a double number of men, so that one half of them are always at rest.

There are no Trade Unions, but custom and demarcation are very strong and the manager believes in following the way of the men, protecting them from extortion as far as possible and noting, though never openly noticing, anonymous letters.

Arrangements for training vary. Formal apprenticeship seems to be rare, but many a man works at the factory equivalent of the trade to which he was born and one hears on every side that the Indians make very good mechanics, though they need more supervision than European workmen.

Any account of engineering in India would, however, be incomplete without some mention of the giant Tata Iron and Steel Work at Tatanagar near Jamshedpur. About 30,000 men and youths and coolie women are employed here and there were 150 Europeans on the staff when the works were visited. This number is likely to diminish, for the company maintains a very excellent engineering school for apprentice-students. These young men pursue a three years' course of study, working half their time in the class-rooms and laboratories and half in the workshops, 'going through the shops' as the young engineer does in England. When a European's contract of three or five years' service expires, it is not renewed if there is an Indian, Anglo-Indian or domiciled Briton suitable to replace him, and this process of Indianization has made rapid progress in the last three years.

The workmen come from all over India, but Punjabis and Sikhs predominate in mechanical work, and there are some processes of straightening and testing for which the accurate and keen eyesight of the almost aboriginal tribes of the nearby hills and forests prove invaluable.

The coolie here earns six or seven annas a day (i.e. about 13·8 rupees or 20*s*. a month), artisans can earn 78 to 100 rupees a month and the highest paid Indian at present on the staff receives 2,500 rupees. On the other hand, the average salary over the whole works, including that of the American manager, works out at one and a half rupees a day. This presupposes a large substratum of poorly paid labour and, as a matter of fact, more than 50 per cent of the employees earn less than one rupee a day, and 10,000 of these are on the basic wage of six or seven annas.

This is one of the few firms in India that has a labour department with accurate records of engagements, transferences, promotions and dismissals. About 10,000 engagements are made yearly, but the labour turnover of 35 to 40 per cent is not high for India. A very small percentage ask for the long periods of leave so common in the Bombay region. They are said mostly to leave their lands to the care of relatives and to work steadily until they have amassed the sum on which they intend to retire and take up other and, probably, more congenial pursuits.

Tatanagar was founded in a wilderness and a beautiful little city has been built near it to house a large proportion of the workers; rents are from one rupee a month upwards, but are 30 per cent to 60 per cent below the ordinary economic rent. Land for building is also sold on easy terms with building loans at 3 per cent up to two-thirds of the value of the house.

There are hospitals, clubs and seventeen schools of various grades and languages, as well as technical and night classes which open the way for any ambitious coolie boy, if such exists, to work his way to the top of the tree.

The match industry is attracting a great deal of political attention in India at the present time. There are about 40 factories employing altogether over 1,500 people and a great deal of match-box making is done in the cottages, the heaps of scarlet and blue boxes making picturesque splashes of colour in the often drab surroundings. Bengal, Bombay and Burma account for the majority of the workers, though one factory was visited as far north as Lahore.

This industry is a curious mingling of old and new—modern machinery sometimes in use and sometimes packed away or broken, splinters drying by mechanical means or spread on the roof; and men and women often working with a leisureliness never known in England, Match-box making and packing were once among our sweated trades and the work is still done with bewildering rapidity. The Indian *says* that he earns a rupee a day and neither man nor woman appears to exert undue effort in doing so. It is quite possible that there was some exaggeration but evidently the people were getting what they wanted in the way they wanted and the hygienic conditions seem to be tolerable, and in some cases attractive.

The leather trade is in process of emergence from being a purely domestic industry and the only factory of any importance is at Cawnpore. Here an eight-hour day is worked and, after visiting a series of cotton mills, it comes as a surprise to see no one sitting out, while the work goes on much as it would do in a similar factory in England. Tanning is an outcaste occupation and a good many poor Christians engage in it, and, outside Cawnpore, it is largely directed by Mohammadans. Several tanneries were visited in Madras Presidency. Conditions there are very primitive, but the work-places are open sheds in large yards and the people rarely work a full day. They are simple folk, and their progress is hampered by their drinking habits. Some of the housing provided for them is very elementary, the worst being a kind of enormous barn partitioned into living spaces by walls about four feet high. Similar accommodation, but with higher partitions, is occasionally offered to hop-pickers in England for the short season that they spend in the gardens, but some of the Indian folk had lived for eight years in their barn—an outrage on the instinct for family privacy which characterises the Indian. In this trade the employers are very proud of their 'free advances' to the work-people. Sometimes they enable them to leave their villages by paying up their local debts, sometimes they advance sixty or even up to a hundred rupees to meet extra family expenses, weddings being the most serious item. To advance a sum like this to a man earning about fifteen rupees a month is, in effect, to bind him to the business, thus perpetuating an insidious form of serfdom that is unfortunately only too familiar in many of the rural areas in Central and Southern India.

Most of the tanners are on piecework with a guarantee of ten rupees a month, but the daily unit of work, if available at all, brings in one rupee. The men seem to work very hard until they have earned this and they then go home. Debt evidently does not press very heavily, for they could often earn two rupees if they chose to work longer. Some of the factories provide free fuel.

Rice-milling is a widespread and characteristic trade in India where rice is the staple food of the people over enormous areas.

There are nearly 1,350 rice mills under the Factories Act, a number only exceeded by cotton, ginning and baling, and both trades probably comprise a number of small and unregistered factories. The rice mills employ upwards of 70,000 men and women, but 41,000 are in Burma, which is outside the scope of this report.

Madras Presidency is the biggest employer in rice-milling in India proper, with over 14,000 employees, Bengal coming next with about 10,000.

The rice mills are not large establishments and employ on an average only about fifty men and women each. Many of the mills are old, some are out of repair, some are dark and overcrowded, some are dirty, others are new and airy and clean, and the machinery is generally well-guarded. Most of the rice mills visited were in the area surrounding Bezwada (Madras Presidency). There were four daily shifts, very usual hours being from 5 to 8 a.m. and from 8 a.m. till noon, and again from 4 to 7 p.m. and 7 to 10 p.m. There were no children, and adults worked two shifts as a rule. Women worked long enough to earn four or five annas a day. A few earned ten annas by working eight or ten hours. The men earn 15 rupees a month as a minimum wage, but are said to make 25, 35 or even 40 rupees. There seem to be about twice as many men as women. Many of these people are of good social standing and the general standard of health was high for India. One factory stated that sick pay up to six months' absence was allowed to workers of over five years' standing, but it is doubtful whether many qualify for this, except where rice-milling is combined with some other occupation. In this part of the country, cotton-ginning and ground-nut shelling was the most usual combination, as these crops are harvested in succession. The husks of the nuts provide fuel for the engine and work is practically continuous throughout the year.

Some interesting notes were furnished by the Indian lady who helped the Commission, describing this combination of industries in two small towns, Nandyal and Kurnool, both in Madras Presidency, but not far from the border of Hyderabad State. Nearly all the mills are owned and managed by Indians, including both Hindus and Mohammadans. The numbers employed vary from 40 to 200 according to the season and from eight to twenty gins are set up in a factory.

The mills are in many cases airy and well-built, with good engines and water supply and adequate fencing and sanitation.

The ground-nuts are stored in the open where they are liable to any kind of contamination. Stray dogs, many of them diseased, wander freely around and help themselves. In Nandyal a man earns eight annas and a woman five annas a day. This is the ordinary local wage for field work and is increased by one anna a day during harvest times to keep labour from wandering away. Much of the work is done in open sheds, but the air is apt to be very dust-laden. The workers belong mostly to the depressed classes and live in their own huts in the vicinity. Those who have drifted in from a distance find other work on the railway or under the municipality or take land on contract after the ground-nut harvest, in order to dig it over for any nuts that have not been garnered.

These people live in miserable huts, built of bamboo and dirty gunny bags, and pay a rent of four annas a month to the landowner. There are several such colonies of people who have no permanent work in the mills, on the railways, or under the municipality, but try their hands at any of these as they fancy. The harvest attracts a large number from the surrounding villages as the people in and near the town work in the mills. These immigrants live during the season where they can, camping under the trees, or on the verandahs of public buildings or charitable persons.

In Kurnool men earn ten and women eight annas a day. Two annas and a free meal are given extra for night work. Shepherds and other castes of nomadic habits drift in from Hyderabad State. Permanent labour is drawn from the higher castes as in Bezwada, with a sprinkling of outcastes, all of whom live in different parts of the town. When heavy work draws extra labour from the villages, the workers are given shelter and return home for week-ends.

One pie (about one-third of a farthing) on a bag of ground-nuts shelled and three pies on a bag of cotton ginned are collected from the customer and given to charity, which in Nandyal takes the form of feeding the sacred cows in a Hindu temple, a levy which produces about 5,000 rupees (£375) a year. In Kurnool the money supports an infirmary for cattle, an arrangement which is the result of Hindu-Moslem friction. During a cholera epidemic the milk was used for the poor, but ordinarily nothing of the sort is done. Except for an occasional visit from a Bible-woman or a catechist to the scattered Christian families, there is no attempt to promote education or to teach hygienic principles.

We might add notes on printing, lock-making, glass-making, sugar-refining and many another industry, but space is limited. Before leaving this general description, however, a word should be added about the numerous mission industries, especially for boys, which are scattered all over India. The aims are to provide boys with a trade, and partly with this object and partly because all the schools and missions are poor, to turn out work that is of trade value. For example, under the Wesleyan Mission in Benares, boys of the criminal tribes are being trained as smiths and brass workers; the lads in the school attached to the Zenana Mission in Calcutta can secure an open contract for brass railway fittings; and motor mechanics are turned out by the American Mission in Ahmednagar and in various other places. There are many printing presses, of which one of the most notable is at Mukti near Poona, which is staffed and run entirely by women, most of whom are permanent inmates of this famous institution. The favourite trade, however, is carpentry, and, despite the simplicity of average Indian household requirements, carpentry schools abound, especially in South India, and many of them have almost more orders than they can fulfil and employ certain old pupils or even men drawn from the vicinity as permanent craftsmen. Many of the southern schools are attached to the Roman Catholic schools. One of the best carpentry schools is near Katpadi (Madras) under the American Arcot Mission, and here a very large variety of first-class work is turned out and the beautiful indigenous art of wood-carving is being revived. These schools usually have a five years' apprenticeship, and during the earlier years some general education is given, while fair wages can be earned as the boys become proficient, out of which they must pay towards their board and lodging. When they leave the schools, many of the young men become instructors, and the others do not seem to want for work, even if it is not of the standard up to which they have been trained. There are also excellent Government and municipal trade schools in many places, including Mysore and Baroda under their Indian princes, and a municipal school in Delhi housed in a beautiful old harem where crowds of cheerful small boys assemble to learn the crafts of their fathers.

Naturally the simplest methods must be taught everywhere, for there are no expensive appliances in the villages, but nearly all schools have some up-to-date machinery, which is generally installed and guarded to conform with factory act requirements. The Government schools, especially, try to improve native methods in domestic industries and it was interesting, for instance, to enter the dwelling of a weaver in a little village near Allahabad and notice in his home traces of Government experiment in a far-distant city school.

The trade training of girls presents far more difficulties. Native dress offers little scope for dressmaking and allied trades, and what is wanted is done by men. The dress of the Punjabi women is more complicated than further south, and there are municipal purdah schools in Lahore where they are taught tailoring and embroidery, the upper class girls often making their own trousseaux, while the poorer ones work both for their homes and for orders. One very interesting girls' school belongs to the Parsee community in Bombay. Here there are departments for embroidery, garment-making, fine laundry work and cookery, some of which are self-supporting. Another school where there is no difficulty about orders is the School of Embroidery and Church Needlework under the Wantage Sisters in Poona. The most exquisite work is done here, some of it naturally and necessarily expensive, but the school is well-known and has an assured market. There are others in this fortunate position, but on the whole the girls' schools depend on weaving, embroidery and lace-making, and have a hard struggle for existence, especially since the introduction of a duty on lace entering Great Britain has struck at the roots of the convent and mission lace industry in South India. The work is nearly always of a high order, but it is mainly a 'luxury trade' and dependent on the interest and goodwill of a foreign market where pecuniary resources are much more limited than of old. It is a serious question whether some central organization should not take it in hand to help the missions in the ceaseless search for new crafts and new markets. There is no doubt that the power to do beautiful work is a great help to the Indian woman. Many, especially Christians and widows, work in their own homes after their mission training, the mission providing the work, which means far more to the woman than the few rupees earned. It not only lightens the load of poverty but it ensures to them the sense of independence and self-respect that their teachers so earnestly desire for them as aids to raising their status and escaping from the age-old trammels of superstition and unnatural customs.

CHAPTER VI

COAL MINING

THERE are two further important industries in India that stand somewhat apart from others and demand separate treatment. The first of these is mining, which is common to most countries, and the second is the cultivation and preparation of tea, which is confined to very few.

A mine, under Indian law, means ‘any excavation where any operation for the purpose of searching for or obtaining minerals has been or is being carried on’, and includes all adjacent machinery, transport, etc., as well as the manufacturing processes of coke-making and mineral dressing.

As with the factories, so with the mines: the Mines Act was passed at Delhi and is the law of the whole land, to which Provincial Governments must add administrative rules to suit local products and problems.

The Chief Inspector of Mines and his staff are, however, officers of the Governor-General-in-Council, although the Provincial Governments decide how far the District Magistrates shall be empowered to exercise the powers and perform the duties of inspectors.

At the moment the Chief Inspector has nine assistants, though one must remember that in India some member of the staff is always away on leave. Between them they have charge of 1,992 mines, and this does not include the important Kolar Gold Mine in Mysore State and the Singareni Collieries in the dominions of the Nizam of Hyderabad. More than 2,400 visits of inspection were made in 1927, the latest year for which reports are available, and many of these visits were paid at the request of the managers, to advise on matters pertaining to health and safety.

Notice of the opening of a new mine must be given within three months of the commencement of mining operations and the manager must be a properly qualified person.

There are about 270,000 miners in British India and 44 per cent of them work underground, the great majority in coal mines, though the 649 mica mines account for 13,000 of them.

Forty-one mines, with an aggregate of 11,684 workers, employ in all only 435 of them underground. Of these, 107 are accounted for by the six Burmese iron mines, where the metal is produced for fluxing purposes only (lead-smelting). There are eight iron mines working in India proper, seven of them lying in the Singhbhum district of Bihar and Orissa, and they supply all the iron ore used in India for iron and steel-making.

There are another 212 mines of various kinds which entail open and surface working only, except for 26 isolated individuals who are reported as working underground.

The mineral wealth of India is very unevenly distributed, and nearly all of it lies eastward of our imaginary ‘cotton line’. Bihar and Orissa is by far the richest province, and after her come the Central Provinces and Burma. The Central Provinces have a great deal of manganese in addition to 29 coal mines and one iron mine. Burmese products are very varied, but she contains in addition to her iron mines all the lead, tin and gems mined in India. All the salt comes from the Punjab, and Madras produces mica and manganese.

Our concern here, however, is with coal, for time did not permit to see anything of other forms of mining. There were 644 coal mines at work in 1927, a decrease of 78 from the number of the preceding year. There is a small coal area in Assam, and rather more extended working in Baluchistan and the Punjab, but more than 90 per cent of the Indian coal is concentrated in south-west Bengal and the south-east of Bihar and Orissa. It lies in a district stretching from Burdwan in Bengal to Dhanbad in the great Jharia coalfield, where the Chief Inspector for Mines has his headquarters and where the Government School of Mines is situated.

There are 191 coal mines in Bengal and 389 in Bihar and Orissa, in addition to the 7 iron and 467 mica mines in the latter province.

Coal mining in India is very different from Great Britain, with its enormously deep shafts, extended workings and deadly perils of fire and explosion. These dangers exist in places in India, but in the majority of mines open lights can be used and the chief danger lies in unexpected falls of roof. There are mines 1,000 to 1,200 feet in depth, but the majority of seams run up to the surface, and even where these are worked out, the second seam does not lie very far below. In some mines shafts are in use, but they serve more frequently to bring up the coal than the miners. 'Going down the pit' in India means most often walking down a steep incline into a spacious tunnel, for a man can stand upright in the great majority of workings. Tram lines for the tubs are laid in the centre. The Indian does not like to go down the mine until he sees his tub in front of him, and men and women, two to a tub, follow the little trains down from the surface until the row of twinkling lights that they carry is lost in the blackness. The Assam mines require safety lamps, but not quite 16,000 are required among all the 153,000 miners in Bengal and Bihar and Orissa, and in these two provinces only 47 mechanical ventilators are in use.

The use of coal-getting machinery is increasing, but pick-work and blasting are still the most common methods. The mines are laid out in squares, and the roofs are supported by huge pillars of coal. When the seam or working is coming to an end these pillars are gradually reduced, their place being taken by wooden props when the limit of safety has been reached. These props are not for permanent use; their purpose is to facilitate the extraction of the last of the coal and to show by their bending when the roof is becoming unsafe. Then the working is barred off and sooner or later it falls in. Occasionally it is packed with sand to prevent subsidence, but more usually the roads above are re-made and the land is retilled. The Jharia region is full of such subsidences that may ultimately under re-afforestation and cultivation add to its picturesqueness, but that at present only give a teeling of strangeness and desolation.

The surface workings are not as a rule very extensive. Screening and loading are often done by mechanical means, but these dirty and, in the case of loading, heavy jobs are still performed in some districts without the help of labour-saving devices. Some of the mines are very damp, but the atmosphere is cooler than outside and the Indian prefers darkness to the glare and heat of the sunlight.

More than 165,000 or rather more than 61 per cent of the miners of India work in coal mines, 59 per cent below ground, 31 per cent on the surface, and the remaining 16,600 in open workings. Bengal and Orissa together account for rather more than 92 per cent of the whole number. Labour is recruited chiefly from the hill and forest tribes of Chota Nagpur, the Santalis being the favourites. A few of these folk live permanently near their work, but this practically only happens when they can secure land and carry on agriculture as well as mining. Others come in groups, sometimes for weeks or months, sometimes for days only, earn enough for their immediate cash requirements and return at once to their own villages. It is folk like these last who make it difficult to enforce the law. They arrive, go down the mine for two shifts if possible, sleeping and eating as suits them and then go off home again. Others settle down far more permanently, and naturally it is to the interest of the managers to secure this. The hereditary miner has, up to the present, been almost unknown, and there is often a shortage of labour.

Round Asansol the surface is mainly rice land. Some companies lease this direct to their immigrant labour. Others lease it to zemindars who in their turn become landlords, sub-letting to the village miners. One such Santali village may be taken as an example. The group had migrated between thirty and forty years ago, and they only return occasionally to their old homes to pay visits to their relatives. They have built a village of their own kind near the mine, a long narrow main street with the dwellings on either side, each consisting of a group of clay huts thatched with straw, and with stables and rick-yard included in the high surrounding wall, which ensures complete family privacy. They mostly grow enough rice for their own use and possess pigs, poultry, goats and a few cows. Mining to them takes the place of the 'moneycrop' needed to buy their scanty clothes and their *dahl* (lentils), condiments and spices, salt and sweets. Unfortunately, too, they are heavy drinkers and rice beer is plentiful and cheap. Much of the land is farmed on the 'fifty-fifty' plan, the landlord taking half the crop. These people are an independent, upstanding race, well-built and intelligent. They look healthy too, in the main, though there is a good deal of catarrh and enlarged spleen among the children and one wonders why there are so many mouth-breathers. They work very much as they will in the mines and everyone may bring back as much coal as he or she can carry in the usual head-basket. This coal is usually coked before use, a process which takes place in little fires, dotted wastefully along the length of the village street.

Near by is a Bauri village, inhabited by a people who were the earliest miners and are probably the aborigines of these parts. In spite of skill and intelligence, they are of a lower physical grade than the Santalis. Their village is more unkempt and more haphazard in arrangement, but they also are preserving their primitive home life and working in and about the neighbouring mines to gain a supplementary income. On the Jharia coal-field there are fewer native villages and much more housing is provided by the coal owners.

No person may be employed in a mine on more than six days in any one week, and the weekly hours may not exceed sixty in the case of surface workers and fifty-four for those working underground, except in cases of serious emergency, notice of which must be promptly sent to the inspector; as a matter of fact, these limits are rarely reached, forty-six hours for men and forty for women being the average for underground workers. No child under thirteen years of age may go underground at all, a comparatively recent regulation which has stopped children being taken down the coal mines as freely as they are still taken into the jute mills; it is said to be automatically reducing the number of women who work underground.

India may have excellent laws and equipment, but still the industrially-minded visitor gets many shocks, and one of the chief is the presence of nearly 32,000 women in the underground workings of the mines, 28,000 of them belonging to the coal industry, which registers a further 19,200 employed in open and surface work. The theory is that the women go down with their husbands, that the Santali will not go below ground without his wife and that to prohibit the employment of women underground will break into the family life and customs so cherished by the Indian. As a matter of fact, this is hardly a sufficient defence. Some managers compute that only about 15 per cent of the women in the mines are working with their legitimate husbands. Talks in various villages bear out this statement. Couples were met who lived together and worked on different shifts, there are men without their wives and women without their husbands and one group of men, when questioned, frankly admitted that they had left their wives far away at home and were working with temporary ones in the mine. Where coal-getting is by blasting, the miners work in gangs and the men's work is quite separate from the women's. In pick-work, what the man wants is a woman or boy to carry his coal to the tub and the custom is for his mate to be a woman who very often is his wife. The whole question need not be further discussed here, as, in spite of much opposition, the Government of India have decided to withdraw all women from the underground workings. Few will question the rightness of this decision and, for the comfort of those who dispute the slow stages by which it is to be effected, we may add that the exclusion of the women is rather an act of wisdom than the righting of a dangerous abuse. The work is hard, dirty and sometimes disagreeable or even dangerous, but the lot of the female coolies above ground is not much better and if the women are eliminated by slow stages they will at least have a chance to be re-absorbed into the agricultural community, and not be driven with disconcerting suddenness to overcrowd other ill-paid occupations.

Ill-paid their work certainly is, except it be judged solely by the standard of other labouring work undertaken by the women, and mining does not rank with artisan work even for the men, as it does in the west. Seven to 8 annas is the price for loading a tub with coal and three tubs is the most that can be achieved in a shift. In this case, the man takes the rupee and the woman the annas. Near Asansol it was said that man and wife together filled two tubs in a shift, each tub holding from two-thirds to three-quarters of a ton. For this 8 annas a tub plus 1 anna bonus is paid according to the manager, 7 to 7½ annas according to the work-people. One wonders whether the discrepancy betokens a levy by the sirdar or time-keeper.

At any rate in some districts it is said that the miners rarely work more than four or five days a week, except just before the rains, when they accumulate a big stock of coal, so that they can go off to their planting as soon as the rains begin. Taken as a whole, skilled men are said to earn 11 to 14 rupees a month, women 8 to 9, and coolies about 9½ rupees. The average *daily* wage of a coal miner is 13 annas—a mica miner only earns about 7 annas a day, but miners employed in gold, tin, lead and salt mines receive as much as two rupees a day.

It is difficult to generalize on the condition of the coal-miners. At a crowded trade union meeting in Dhanbad, one was struck by the low standard and general look of exhaustion, and the very next day a reverse impression was produced when actually in a mine. The women naturally looked very dirty and shabby when at their work, though some of them wear plentiful jewellery, but there were others met outside when they had cleaned and dressed, who were much above the average coolie-woman in appearance.

Proper sanitary accommodation and a fit supply of drinking water must be provided at every mine according to the rules made by the Provincial Government, who must also prescribe the nature and extent of compulsory first-aid and medical supplies. The inspector has power to make any special orders with regard to health and safety that appear to him to be necessary, but appeal is possible from the decision of an inspector to the Chief Inspector and from him to a committee appointed by the Local Government, the mine-owner and the interests of labour.

Accidents and dangerous occurrences must be notified to the authorities according to the rules in force in the locality.

In 1927 there were 163 fatal accidents, 25 of the victims being women. This was 11 in excess of the total for the previous year, but 6 less than the average for the past few years. Accidents underground causing serious bodily injury numbered 445 (women 61) and 101 of the fatalities were caused by falls of roofs or sides, 18 of them in fenced-off places where working had been prohibited. Four of the women were fatally injured by falling when carrying heavy loads of mineral. Among the fatal accidents, nearly 63 per cent are classed as due to misadventure, and about 25 per cent were the fault of the victims or their fellow-workers. Twelve per cent were laid to the charge of the management or subordinate officials. In this connexion the Chief Inspector writes: 'It is regrettable that the discipline maintained in Indian mines is far below the standard attained in other countries. . . . Most of the labourers in Indian mines are illiterate and ignorant men to whom ideas of discipline are something new and difficult to comprehend. They are, however, amenable to discipline, and it is one of the most important duties of a manager to train the labourers in "safety-first" principles both by personal example and through subordinates.' The chief difficulty in avoiding this class of accidents is not peculiar to India. It is almost impossible to foresee the endless dangers that may arise through ignorance and foolhardiness, and even in England surprising examples could be quoted. It is small wonder then that the primitive Indian, unlearned and fresh from his woods and forests and peculiarly fatalistic in temperament fails to perceive the danger of sleeping in the shadow between railway trucks, making a pillow of railway lines or sheltering in the drum of a winding engine.

Nor does he understand the hygiene of community life. Serious epidemics have occurred from time to time, and an outbreak of cholera in 1908 decimated the mining population in the major coalfields. There have been changes for the better since then but still 58 per cent of the miners are infected with hookworm; the mines are not wholly to blame for this state of affairs, for the complaint is rife in the villages, but the danger is always increased in mining areas. Experience in the tea-gardens has shown that this debilitating disease can be very greatly reduced, if not eradicated, wherever there is a more or less settled population. No one claims that the average mining population is settled, but there are a sufficient number who are semi-permanent at least, and among them the percentage ought by determined effort to be very greatly reduced.

Still, although so-called 'welfare' is not very far advanced on the coalfields, it is by no means absent. It is the custom in most places for the miners to have free housing, light (often electric), coal and medical attendance. On both the Jharia and the Asansol coalfields there are Mines Boards of Health, appointed partly by Government and partly by the colliery superintendents. The Chief Inspector of Mines is a member of both boards and the chairmen are the Deputy Commissioner and the District Magistrate respectively. A cess is levied on the coal raised and the proceeds are devoted to improving the general health conditions of the district. Water has been brought from a distance, wells have been sunk, land has been drained, malaria has been very greatly diminished, and strict rules have been laid down for housing.

A curious type of building is favoured by mine owners and railway companies. Tall houses are built with curved tunnel-shaped roofs, part of which projects to form a verandah. The old ones are often back-to-back buildings and the type is said to be very hot. It is, however, solid brickwork and the roof is thick and one would think it could not be hotter than the flimsier structures roofed with corrugated sheeting that one sees in some factory districts. The mining type of building is certainly distressing to one's æsthetic sense, but where these tunnel sections have deep verandahs, roof and wall ventilation and are kept whitened and clean by the inmates, they are probably not less wholesome than many slightly more beautiful buildings. Some of the mines build on the more usual industrial lines.

In the Singareni Coalfield in Hyderabad State, where British Indian law has no force, the company pride themselves on providing conditions in advance of the legal requirements, both of the Nizam's Dominions and of British India. They do not house many of their workers but they have one particularly good village consisting of square detached houses, some double and some single, round which the inmates construct their own verandahs and gardens. The roads are wide and the houses are well spaced; in fact here is a village that shows an advance and not a retrogression on what the people would normally provide for themselves, although, being in the depth of the country, there is no attempt at paved roads and modern sanitation.

Many mines provide hospitals, mostly on the simple lines usual in India. The finest example or, should we say, exception is to be found on the Kolar Gold Field in Southern India. Here the hospital dates from 1913. It has a staff of five highly qualified doctors and is equipped with the latest modern appliances (X-rays, Finsen light, etc.).

Schools are not general, but they are increasing in number, although an Indian owner sadly observed that he had given up his girls' school in despair, as even when he offered them one pie per attendance (one-third of a farthing) they would not come. The East Indian Railway Company are bolder. On the Giridih coalfield they have 32 schools with room for 2,000 children at which attendance is compulsory for boys up to 12 years of age and voluntary for girls. A series of higher schools for the more promising boys has helped to create a force of skilled workmen, many of whom have migrated to the better posts in other fields.

There are other modest beginnings of welfare. One manager provides wide stone seats in his village which give a dry open-air resting place. Others put up swings and gymnastic appliances, provide cinema shows or organize sports, but their efforts do not always meet with success. The village markets and bazaars are practically always under inspection, so that the people may not be exploited either by high prices or low quality.

The great need here and elsewhere is education, education and training in co-operative methods, and, if possible, the revival or introduction of home trades for the women. One manager gave as his aims for his workers: first, healthy homes; secondly, a knowledge of hygiene and the laws of health; thirdly, enough education to save them from cheating and exploitation, particularly when they travel.

These aims are not achieved under every company, but, singly or together, they are being fairly generally pursued. In mining, as in other industries, they would be nearer realization if there were special officers charged with the oversight of the villages, schools and other welfare provision.

CHAPTER VII

TEA

After a long course of factory visits, there seems to be a wonderful romance and refreshment about the tea-industry. To begin with, it must be sought out far away from the noise of the town and the dust and heat of the mills. Hot winds may be blowing over the southern plains and the air may be weary under clouds heavy with unshed rain while the thunderstorms roll around in the hills, advancing and retreating and ever delaying to arrive. Yet two or three hours either by motor or mountain railway and by a series of incredible twists and curves will carry the visitor up six to seven thousand feet through and among the clouds. Below and around the jungle clothes the precipitous mountain sides; far below the plains stretch away like a shining sea, and a damp cool air blows that brings dreams of England. Up in the fastnesses of the remote valleys whole mountain sides have been cleared to make way for the tea-bushes, set in orderly rows in the trimly-weeded red soil under the waving branches of the slender shade trees.

Here and there, on ledges of mountain rock are perched the managers' bungalows or little groups of labourers' dwellings, while deep below them are the small factories and administrative buildings of the estate.

Whether one rises from the plains to the regions below Ootacamund on the Nilgiri hills in the south, or mounts the mighty foothills of the Himalayas to Darjeeling, the outlook is much the same over the great slopes of the tea-gardens, covering acres of the mountain sides.

Or the visitor may leave Calcutta in the heat and dust of the early evening and travel through the night and at noon cross the wide and beautiful Bramaputra. Then another train receives him and carries him up over hills, through clefts where the jungle almost brushes in at the windows, across wide plains of rice land and past tiny towns and on all through another night, until, in the early misty morning, he finds himself in the far-away parts of Northern Assam.

Here the tea-gardens literally stretch for miles, the liquid greens of their leaves making a solid carpet under the delicate tracery of the silver oaks that give a tempering shade to bushes and to workers, and green manure to the soil round the precious plants. Sometimes the blue ageratum that is a popular bedding-out plant in England, rears itself through and between the bushes, casting over them a delicate blue haze, a shade lighter than the haze of the bluebells in the English woods in spring, while its leaves and creeping stems shade the ground beneath and help to hold the moisture. Above the sky is often veiled in mist, giving a softness to the landscape that once more makes it difficult to believe that England is so far away. Blue hills, up which in these regions the tea-gardens do not stretch, stand sentinel in the distance and broad stretches of jungle, rice land and pasturage alternate with the tea-plantations.

Alighting at one of the primitive stations, one may find a little town with its market place, post office, a few houses and one or two shops. There will probably be a drive of several miles to the centre of a tea-estate, its group of management bungalows standing near the factory and out-buildings, some of the thatched cottages of the labourers and perhaps the hospital and other administrative buildings.

Here the manager reigns supreme, probably over a group of tea-gardens each with its European administrative staff. He may have served thirty years or more under the one company, seeing the gradual development of the country since the days when there were no railways or proper roads and he had to do the last twenty or thirty miles of his journey on an elephant. He is probably a perfect mine of information about the different tribes, their religions, customs and magics, some of which may even have been practised in his own sick-room at a time of emergency. It is curious to find these planters, themselves Christians and Britons, obliged to give a tremendous amount of time to unravelling and adjudicating in every kind of social and religious dispute which the village panchayats have failed to settle, and gravely administering laws, customs, and even superstitious observances that are utterly alien to any western code of life and thought. Matrimonial disputes are a mild form of the exercise.

There are 643 tea-gardens in Assam employing more than 50 coolies and 549 of these have their own factories. It is very difficult to generalize about the management of the estates. Certain broad lines have either become customary or are agreed on by the company-owners, law regulates both factories and recruitment and the authorities require definite statistics of births, deaths and certain diseases. Only 11 of the gardens were uninspected during the year ending June 1928.

There is a great deal of popular misconception about tea-garden labour, and the remoteness of the majority of the tea-gardens makes it the more difficult to refute error, to arrest rumour or to correct ideas founded sometimes on the outlived troubles of a remote past, sometimes on an isolated case of cruelty or neglect. Quite apart from any ideas of welfare or humanity, there is a chronic scarcity of labour in Assam and it pays the planters to make conditions attractive. Under old systems of contract labour, injustice and hard dealing were possible and cases have undoubtedly occurred. Now that contracts are forbidden and recruiting is so safeguarded by law as to be a very heavy expense it is a serious loss if labour is dissatisfied and absconds. At the same time, the statement of an experienced missionary to the effect that people return from Assam in far less good physical condition than they went up cannot be dismissed from consideration even if it is difficult to explain in the light of things actually seen on the gardens. It may have some relation to the managers' own talk of 'Assam rot', a term they use to denote a general deterioration of physique and morale that is, as they assert, likely to affect both European and Indian immigrants after a few years' residence, unless long leave intervenes.

Some of the difficulty may arise from the trying climatic conditions during the protracted rains and from the prevalence of malaria, or there may be some connexion with the unexplained vanished civilization of Assam. When the tea-gardens were planted among the hills of the south or on the outlying slopes of the Himalayas, virgin jungle was cleared to make room for them, and cultivation and human habitations were carried into regions previously tenanted only by roaming forest tribes and wild life.

In Assam, jungle has likewise been cleared to make room for the tea-gardens, but it is a new jungle that has submerged old cultivation and buries here and there fine old buildings, tokens of the vanished life of a virile race. Further, the life of the indigenous countryside is still mysteriously dwindling, at any rate in some parts of Assam. The people do not show signs of want, their houses and compounds are generally well-built and the cattle have not the semi-starved look so common in many parts of India. Yet the people are drifting. They have no sense of organizing their land; pasture is left to chance and trees are not replanted. Once there was a flourishing silk industry, but the food-trees of the worms were not cared for and the craft is dying out. The small independent cultivator can secure his food if he works about eighty days in the year on his land and his wife puts in another forty days. His wants are few and he cares for little else and goes on as his fathers did before him, and the fertile lands and wide spaces lie uncleared and untenanted, waiting for the immigrant.

According to most recent reports the total strength of the labour force in the Assam tea-gardens is a little over 1,025,000, giving an average in different districts between 0·86 and 1·6 adults to the acre, the children working at plucking and certain other light jobs as soon as their parents like to take them into the gardens. The annual loss, or labour turnover, varies from 6 to 7 per cent; in other words, there is a deficit of something over 60,000 to be made good each year.

Some of this loss is through death, some from labourers returning to their old homes, and some because labourers who have prospered on the tea-gardens move out to become independent cultivators, holding land direct from the Government.

The death rate on the gardens, taking the two sections of Assam together, is 19·6 per 1,000, giving an annual loss of about 20,000. This will eventually be balanced by the annual births, which number roughly 32,800 or 32 per 1,000, but the industry is not yet sufficiently stabilized for this compensation to have a full immediate effect.

It is said that the immigrant arrives with three ambitions;

the first, which is soon realized, is to possess an umbrella; the second, to possess a buffalo; and the third, the ineradicable hunger of the Indian, to possess land.

It is reckoned that a garden labourer can save sufficient in six years to attain this summit of his ambition and that, up to the present, about 600,000 individuals have so attained. They are settled on Government land of which they are reported to take up on an average about 10,000 acres a year. Some of them return to the gardens from time to time as seasonal day labourers, but this steady colonization is involving the gardens in an annual loss of over 25,000 coolies or upwards of 2½ per cent of the total labour force.

It is thus obvious that for a considerable time to come the prosperity of the industry must depend largely on immigration and the annual influx of about 40,000 is barely sufficient to meet its needs.

Assam is a wonderful rice-growing country, and, naturally, the rice-eating races settle down most readily. Taking the whole adult labour force in June 1928, we find that 36 per cent come from the United Provinces, Bengal and Bihar, 31 per cent from Chota Nagpur, 13 per cent from the Central Provinces, 10 per cent from Madras and 9 per cent only from Assam, leaving 1 per cent from other places.

During that year 42,845 immigrants came into the province, viz., 24,124 men, 10,027 women and 8,694 children. These figures may serve to refute another misconception sometimes met in the south to the effect that women, being particularly valuable for garden work, are imported in numbers greatly in excess of the men, to the very serious detriment of social morality. As a matter of fact, the above figures show the exact reverse to be the case and this conclusion is borne out by enquiries on certain tea-gardens. One planter gives his figures as: 1,690 men, 1,628 women, and 509 children. From another district the reply is: ‘Owing to the very strict recruiting regulations we have great difficulty in getting women. Most of the new coolies are men who have to be sent back to their own districts to fetch up their wives.’ The morality on a garden is probably high as compared with the rest of India as, though the coolie is to a large extent his own master, the manager is responsible both for the health and happiness of his labour force and immorality makes for neither. Also the conditions of a tea estate allow a woman to get a fair hearing, and she can make a complaint and get redress without fear of after-consequences from her relatives. The question was put in yet a third district with the following result: ‘The answer to your question is just the reverse of the allegation. The great difficulty experienced for the past ten years is that so many single men come up to Assam in many cases leaving a wife and family behind. This is not good either from a working point of view or morally. The case of the Ho Mundas, of whom I have a great many, may interest you. In their country the price (according to their custom) of a bride is 5 or 10 rupees and a cow or even less. On my garden now through the shortage of marriageable women the price is 80 rupees cash. This is not a healthy condition as it often means the pair run away to avoid payment and the family is split up. Of the working adults on my garden, men number 1,448 and women 1,103 and I am more fortunate than most gardens.’

Labour recruiting must be carried on by Indians who are actually workers on the gardens for which they are acting. Sirdars are licensed to return to their old homes to try to secure new workers. Naturally their expenses must be paid; the license must be obtained; capitation fees on sirdar and recruits must be paid to the State, and the Tea Districts Labour Association; the recruit receives a bonus for debts, and a bonus on arrival, clothing, food and fares. Altogether, it generally costs 150 rupees or more to secure an immigrant and then the law allows no contract. It is small wonder that the Tea Association are pressing for a re-arrangement of the regulations to decrease the burden on the industry. Their plea for co-operation between themselves and the Government is strengthened by the fact that Assam is being colonized at the expense of the tea industry, which provides a large yearly influx of colonists free of charge and acclimatized by a comparatively short experience of garden work.

Most of the work on the gardens is parcelled out into daily quotas, which take about four hours to perform. The wage for this is four or five annas, calculated to bring in the standard basic wages of seven rupees a month for men and six rupees for women. Anyone is welcome to do a second quota in a day, which will be paid at a slightly higher rate than the first, but very few care to do so. The men do the nursery work, i.e., the cultivation of the young seedling, the heavy hoeing and the heavy pruning. The women do the light forking of the soil and the top pruning. A common quota for a woman is to top prune sixty bushes. Boys are detailed to go from worker to worker to sharpen knives, and there are crèches at convenient points on the gardens where young children can be left in charge of an older woman. Once or twice a day according to the work in hand, tea-carts wander round the gardens with great barrels of hot tea. It is a pretty sight to come upon a group at work, say, at jungle clearing, when the tea-cart comes near. The men file out of the bush in a long line, followed by the boys and girls whose duty it is to collect and sort the small debris. Each carries a fresh green leaf which is folded to act as a large cup into which the tea is doled out.

In addition to the actual garden jobs, the men are called off to many and various duties for the upkeep of the estate such as brick-making, thatching, carting and various types of building.

At the time of the tea harvest something like 10 per cent of the garden strength are drafted into the tea factories, so about 100,000 must work at sometime in this way, though the registered average daily total for the year was only over 43,000 in 1928. In Assam as a whole the men workers in the factory are just over 50 per cent of the labour force. There are 51 factories other than tea factories, in 17 of which, employing in all 800 persons, some women and children are probably employed. The remaining 34 are concerned with men's trades only, though there may of course be a few boys among the 3,529 workers. In 1928 there were 13,059 women and 9,244 children working in the 560 registered Assamese factories, so it is obvious that most of them are in tea factories although so large a proportion of the work is men's work that one wonders where all the women and children come in.

These factories are naturally under the charge of the Factory Inspector and even in those that are small enough to be outside the meaning of the Act, the manager should fence and guard his machinery and provide the usual protection. Otherwise, in the event of an accident, he renders himself liable under the Indian Penal Code for negligent conduct with respect to machinery.

Although the general provisions of the Factories Act apply to tea as to other industries, in view of the seasonal nature of the work and the necessity for dealing promptly with supplies as they come in from the gardens, modifications of the orders dealing with rest periods, holidays and hours of work are allowed. In lieu of definite intervals for meals and rest 'the number of workers on a particular job must be at least 25 per cent greater than the number required to do the work at any given time'. Generally speaking no person may work for more than 14 days without a whole day's leave or for more than 11 hours in any one day or 60 in any one week, but there are exceptions which permit the weekly average to reach 66 hours in any one month, provided that time and a quarter rates of wages are paid for all hours of work in any week in excess of 60. It is satisfactory to note that men in 75 per cent and women in 84 per cent of the factories do not normally work above 48 hours in a week. This fact and the irregular nature of the inside work are fortunate in view of the extremely dusty nature of tea-sorting and the difficulty of ventilation. 'In many cases the atmosphere is impregnated with tea fluff and the women and children employed therein work with a cloth tied round their mouths and nostrils. These conditions obtain more in hill factories where windows must be closed on account of mist and dampness which would spoil the tea. In the plains it is possible to have windows open, but without some mechanical means to create a constant circulation and change of air, open windows are of little value in disposing of tea dust and fluff.'[1]

The factories are so scattered and many of them are so difficult of access during the monsoon, just when they are most active, that the inspectors frankly confess that they confine themselves principally to questions of health and safety, although there were three prosecutions for the illegal employment of children in 1927. There were 67 accidents reported during that year, five of them fatal: 'The majority of these accidents occurred in tea factories, mainly in connexion with transmission machinery . . . generally caused by the operators' loose clothing getting caught in the belts or shafting during belt manipulation or oiling operations.'[2]

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[1] *Annual Report of the Working of the Indian Factories Act in Bengal and Assam for the year 1928.*

[2] *Annual Report on the Working of the Indian Factories Act in Bengal and Assam during the year 1927.*

The weeks when the men are in the factories coincide with plucking time on the gardens when the whole area must be gone over once in seven days, if possible, and every new shoot grown enough to have a bud and two leaves must be nipped off. Women are quicker at this work than men and the children are nearly as successful as their mothers. Contrary to their usual customs, despite the rains, and often torn by the conflicting claims of the rice-fields, the pluckers generally stay seven hours or so a day in the gardens, taking a rest and lunch there, and their work is paid by weight.

Workers in the factory receive a standing wage in excess of the ordinary garden rates and, in some cases, a bonus when the factory closes down.

The basic monthly wages of seven and six rupees for men and women respectively do not represent the actual cash earnings for there are many extra services that are paid separately. In 1927–28: 'The average monthly cash earnings calculated on the average working strength were Rs. 12–11–4 (19/0¾*d.*)[1] for men, Rs. 11–0–6 (16/6½*d.*) for women and Rs. 6–13–4 (10/3*d.*) for children in the Assam Valley, and Rs. 10–4–7 (15/4½*d.*), Rs. 8–6–4 (12/7*d.*) and Rs. 5–4–0 (7/7*d.*) respectively in the Surma Valley.'[2]

There is, however, a good deal of variation from month to month, as will be seen from the following statement, which gives the average attendances and wages for two lean months and two rich months in 1928 for a group of four gardens:

	JANUARY		FEBRUARY		JULY		AUGUST	
	% Av. Att.	Rs.	% Av Att.	Rs.	% Av. Att.	Rs.	% Av. Att.	Rs.
Men ...	80·5	11-5 (16/11)	83·25	11-2 (16/8¼)	74	13-14 (20/7½)	73	14-11 (20/6)
Women ...	70·5	11-9 (17/5½)	73·5	8-9 (12/10)	63	17-10 (26/5¼)	64·5	18-7 (27/7½)
Children ...	73	8-6 (12/6¾)	76	6-11 (10/0¼)	73	12-10 (18/11)	73	12-1 (18/1)

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[1] These are the English equivalents to the nearest farthing.

[2] *Report on Immigrant Labour in the Province of Assam for the year ending the 30th June, 1928.* Assam Secretariat Printing Office.

These figures must not be taken as expressing the average *family* cash income. This is generally estimated to be 20 to 23 rupees (30/- to 34/6*d.*) a month.

The real wages of tea labour are not, however, represented adequately by cash earnings for there has always been a great deal of what may be called 'payment in kind', and there are also certain cash benefits.

Details vary from estate to estate, but housing and medical attendance are always free. Most estates give free wood fuel and pasturage, though a charge is often made of two annas (2¼*d.*) a month per beast for herding. It is usual to provide two free meals a day for all children who are too young to work in the gardens. Attendance is optional but the meals are naturally popular. It is a pretty sight to see the little brown figures scurrying in from all directions to the feeding centre, each carrying a plate or bowl of some kind, and many a small girl running like the wind in spite of the baby brother astride on her hip. Once arrived, they squat down under the roof of the open centre, that probably serves as a clinic at other times. Then the pails of rice appear, followed by the smaller vessels of *dahl* (lentils), or sometimes a little fish, and the business of eating, always solemn in the east, begins, the little caretakers filling the baby mouths alternately with their own. It is explained that the free feeding is not adopted because the parents are too poor to feed their children, but that they are more likely to put money into jewellery or to hoard it than to spend it on extra food, and that it keeps the children under observation and helps to raise the standard of child care. Some planters consider that these free meals have done much to humanize the whole atmosphere of the gardens and to promote a general feeling of content.

Advances are often made without interest for approved needs and not infrequently old debts are freely paid off before immigration. In Assam these are not reclaimed, but some of the southern gardens enter them as debts and write off a certain proportion for every month of service. Orphans are provided for and many companies keep a reserve stock of grain or rice which is sold in competition with the local markets should any attempt be made to raise prices in a time of scarcity. One garden pays an extra two rupees a month to every man who has more than two children below working age.

A yearly bonus is very often given and the people prefer this to a monthly increase of wages. This may be twelve rupees per man, no deduction being made for absences amounting to less than two months; women get eight rupees and children five on the same terms. Sometimes there are allowances of cloth, tea or blankets; some estates allow every landholder two months' leave during the rains to prepare his land for planting, and a great many gardens lease their people rice land at a low rent of five rupees per acre a year, the average holding being one and a quarter acres.

Newcomers are guaranteed full pay for any period up to six months even if they accomplish only half the average work, and to this is often added rice at concession rates for four to six months at the manager's discretion. Blankets, clothing and cooking-pots are frequently provided free of charge to enable a family to make a fair start.

There are also allowances in cash and kind in connexion with the health services. Every garden has its own hospital and patients receive free food and treatment and half pay, with full pay for the relative who comes in to attend them. In cases of hookworm, the patient also receives full pay, as an inducement to him to remain for a full course of treatment. Many of the hospitals are very primitive in their arrangements, but these are being steadily replaced.

A favourite type is to have a series of small blocks placed on a curve and facing the dispensary and administrative block. One hospital visited had blocks for men and women and special blocks for maternity cases, dysentery and measles. A feature of this hospital was the number of small two-bedded wards opening on to a large verandah, the idea being to enable husband and wife to stay together. They are especially encouraged to come and take up their abode in one of these rooms a few days before a confinement is expected.

Medical inspection is compulsory for absentees, and out-patients are expected to do half a day's light work in return for their half-pay. The hospitals are rarely full, but the doctors' books record a good deal of respiratory and digestive trouble and the diseases most dreaded seem to be malaria, dysentery, pneumonia and anthrax. During the last rainy season one garden tried the experiment of giving all the children coming for meals a daily dose of a new tasteless preparation of quinine, which is administered in syrup, and this appeared to have excellent results. It is curious to note that in one section of Assam, the Assamese have the highest death-rate; in the other the Madrassis appear to take least kindly to the climate.

Infant welfare is the most popular form of health, or indeed of any social work in India at present and the tea-gardens are no exception to the rule. A maternity allowance of six rupees a month, the basic wage, is given for three to six months, on condition that mother and child attend, sometimes daily, sometimes weekly at the inspection clinic. Regular blood tests are taken and special nourishment is provided for any mother showing signs of anaemia. Sometimes the mother on coming back to work is relegated to light cleaning jobs in the lines for a further period of two or three months, which keeps her near her home and gives her full pay for half work. In other cases a bonus which may be as high as ten rupees is given for a healthy baby, the payments being distributed over the first year of life. Sometimes it is the midwife who gets the bonus and the provision of properly trained midwives is increasing, thanks to a medical mission at Tinsukia which provides both training and inspection.

Apart from these services there is a general attempt to reproduce the people's own home conditions as nearly as is compatible with considerations of safety and hygiene. Sometimes newcomers are given materials, sites and a free period to build their own houses, but tea-gardens are large enough to permit of many scattered villages and this enables different tribes and nationalities to live sequestered and according to their own customs and religions. Each village can thus become more or less a self-governing community but the manager retains the right to veto any disciplinary measures advocated by the panchayat (village council), a right that has most often to be exercised to mitigate severity.

There are villages of different sizes and houses of many patterns. Larger villages may approximate to the familiar lines in their lay-out, but the irregularity of the verandahs, out-buildings and vegetable gardens added by the people themselves

AN OLD-FASHIONED TEA-GARDEN VILLAGE, ASSAM

reduces the monotony of effect. Most of the houses are detached or semi-detached. A favourite type has three feet of brick-walling and corner pillars of iron or brick work. The spaces are then filled in with clay, or some kind of clay and wattlework, and the whole is thickly thatched, unless corrugated asbestos or iron sheeting has been introduced to guard against fire, infection and too frequent repairs (thatch is useful for lighting fires) to the great satisfaction of the inhabitants and the detriment of appearance.

Some managers are introducing brick houses with asbestos sheeting roofs. They are expensive to build, but will require few repairs and the people seem to appreciate them. One attractive scheme provided for a group of twenty-two, some giving double quarters for a large family, some two smaller quarters but with divided verandahs. These were being arranged round an open space which would provide a garden for each house. This manager feared fire and infection. Another, who fears chiefly earthquake and cyclonic winds builds the old pattern of brickwork, clay and thatch.

A great many of the villagers possess their own cattle. In the Assam valley in 1928, in 107 gardens with an adult labour force of 99,102 these folk possessed 5,335 buffaloes and 63,936 other cattle, which probably means that every family had one or more beasts. When a man cultivates his own rice land in addition, as happens on a great many of the gardens, he is to outward appearance almost in the position of an ordinary small-holder, doing part-time work on the garden instead of raising a 'money crop'. His position is, however, in many ways superior to that of an ordinary ryot or the town coolie, who has the same family income of 20 to 23 rupees, for the monthly value of the extra allowances (yearly bonus, maternity, feeding, etc.) comes to more than 7 rupees a head, and in addition, he has cheap land and free housing, garden and pasturage.

Yet he is wonderfully ambitious to leave the garden and become an independent cultivator on a Government grant of land outside, even if he will be far less well off and not so very much more free to all outward seeming. Herein he only exhibits a tendency common to his fellow-labourers throughout the world. Labour wants to live a life of outside work that is independent of the capital that controls actual work. The tea garden looks open to all the world. In reality it is enclosed by intangible barriers and governed by a strict disciplinary control. Strangers would be detected from afar and their presence reported, and although the villagers can and do come and go as they please, attending the local market and carrying on their many side-lines of business, they cannot wander far or absent themselves for long without their movements being noted. Their lives are indeed a curious mixture of this hidden control and a freedom scarcely less remarkable. What with their great preponderance of numbers and the scarcity of labour they can make their own conditions about work as surely as if they were protected by a strong union, and being at heart shrewd and reasonable, the conditions are rarely impossible, provided they have access to their employer and he treats them reasonably. Collisions are in truth remarkably few, but the people are easily excited, very ignorant and very superstitious, and it is small wonder that the men responsible for law and order and business have an almost nervous dread of agitators or interference. As one planter remarked, in discussing the subject, the unseen policing of the gardens is quite as much to secure the safety of strangers, and to save the labourers from exploitation, as to defend the industry.

Naturally, the position is not ideal, but advance is very difficult. The people are almost unbelievably primitive, suspicious and ignorant.

For instance, a succession of bad dreams leads to the belief that the house is haunted. The people move out and no one will use the house again. This is enough actually to check housing reform on a poor or non-progressive estate. Mothers have been known to refuse to call at the manager's house on Sunday for free milk for their weakly babies unless paid to do so, or labourers to join a football club unless paid to play. Education, if offered, makes small appeal. They are afraid it would only tempt their children to leave them. Most of the gardens have school houses but many of them seem to be little used.

These examples are cited to give some idea of the difficulties in the way of reform, but must not be taken to indicate hopelessness on the subject. The great need would seem to be education, which, to be effective, would have to be compulsory and general. At present, compulsion would be very unpopular, and, if introduced in some gardens only, would probably rob them of labour. Nor should an inelastic scheme of attendances be insisted on, such as holds in England. An old plan in some of the Swiss mountain regions was to demand a yearly total of attendances but to arrange these with careful reference to the calls of harvests and sojourns on the high pastures. Such a plan might be devised for the working children in the tea-gardens without putting any undue pressure upon them, for they do not work long hours except in the plucking season. As for the younger ones, could not two hours' schooling be a preliminary to at least one of the daily free meals? Carefully introduced classes or clubs for adults would probably make very slow progress for a time, but if linked with their need for information about the processes of nature, should in the long run be productive of helpful results, for it must have been made apparent more than once in these pages that the people are not lacking fundamentally in either character or intelligence. It is also clear that no extended social or educative work could be undertaken by the present European staff. Special welfare officers are necessary, though they need not be introduced under this name. There are already nurses and doctors and European supervising doctors, but someone is needed to co-ordinate all the social services in order that they may have their full effect, both educative and remedial. In some cases the wives of the staff lend a hand. In many areas they might do more in this way and probably would, if there were someone with organizing ability to co-ordinate their efforts, which must of necessity be limited. One manager remarked that it might be true that companies did not approve of very young marriages among their staff but that many of them would almost be ready to pay a salary to suitable wives.

This description of tea has dealt thus far almost exclusively with Assam, for it is there that the industry is most developed and most aloof from extraneous influences. In the region above and around Siliguri, the junction for Darjeeling, intensive vegetable-growing for the local markets takes the place of rice cultivation with many of the people, rice land not being available among the mountains. The same is true on the Nilgiri and Allemani hills in the extreme south of India, but there the people are near enough to their original homes to go back and cultivate their land, much as the cotton and jute workers do, and the wild hills offer little scope for garden cultivation. Improvements are comparatively recent in these regions, but it is becoming general to supply, in addition to free housing and medical attendance, skilled midwifery and an allowance for food during confinement, optional schooling, a yearly new blanket to each individual, and a daily meal or an allowance for food for all children under working age. It was interesting to hear of at least one tea-garden that had paid no dividend for ten years and has produced one of 10 per cent since the above reforms were introduced.

Housing is not nearly so homelike as in the north. One mostly sees short lines of six to eight houses, opening on to a common verandah and with no back premises. They are generally soundly built and near good and sufficient water supplies. They are also arranged in small groups so that labour can be sectionalized to suit preferences arising out of differences of race, creed, etc.

In these high altitudes respiratory complaints are probably the worst local foes to health, but a constant campaign is being waged against hookworm, malaria and relapsing fever, all three infections native to the plains below and renewed in the gardens as the people go to and fro.

Some gardens have local markets and hospitals on their borders. Others provide these necessaries, and retain the right to supervise the prices of foodstuffs in return for free premises and carting of goods.

The customs of recruiting and of paying wages through sirdars still linger, but the newer managers are increasingly paying wages themselves, and themselves explaining methods of calculation to any labourer who feels himself aggrieved. Here, as in the north, the managers testify to the reasonableness of the men when handled in this way, and it was interesting to hear on one garden that they had learnt to take a keen interest in the movements of the tea markets and the reputation and fate of their tea. Such traits point to a future for those races, despite the ignorance and superstitions of the present.

The organization of the tea industry presents peculiar social difficulties, some of them very intangible, but they are difficulties that always arise when an industry is so remote that the employer must take charge of the whole lives of his workers. The results were often disastrous in the England of a century ago, they have been disastrous at times in America, and at times most educative. The tea-garden labourer in India to-day might well rouse the envy of his fellows in other industries. Still, at its best and at its worst, the system is not a natural one and sooner or later infringes on the instinctive human effort after liberty and self-expression. To educate a people we must recognize their future in the light of their achievements in the present, building along those lines rather than along our own. There is abundant proof that this sympathetic attitude exists in the tea industry, though all too short tours forbid the assertion that it is general. Everyone must recognize that it is the primary duty of a manager to make a business success of his estate. On the other hand, enlightened management recognizes that this is only to be attained with the co-operation of a contented labour force who will not long be contented with paternalism alone.

Without venturing to speak for the industry as a whole, things seen give ground for the belief that tea management can contribute much to the solution of the problem of ‘ village uplift ’ in India and that its present methods are by no means always the negligible factor in this movement that some would have us believe.

CHAPTER VIII

PROGRESSIVE MOVEMENTS: I. VOLUNTARY WELFARE

It is customary to use the word welfare in a very broad sense in India and to describe under this term all those varied movements initiated to help the industrial workers, which used in the west to be generally and vaguely known as social work.

A great many such movements exist in India and their number is increasing. If mention of them is omitted in the following pages, it is not from lack of interest or sympathy or that their importance is underrated. The business of this report is with welfare as directly connected with industry, and time and space compel the barring off of many a fascinating bypath.

A companion volume on 'Social Work in India' is wanted to bring the following pages into truer perspective in relation to modern progressive thought and action and social movements in India as a whole.

Enough has been said in previous chapters to show that the ideas underlying the so-called welfare movement in industry are gaining ground in India, and indeed, that they have probably already effected more than in any other eastern country, with the possible exception of Japan.

Employers are naturally influenced by public opinion in their choice of voluntary welfare activities. The whole country is becoming aroused on the questions of ill-health and malnutrition, maternal and infant mortality, bad housing and illiteracy. Industrial welfare is quite naturally concerned first with these questions, and a long way after come such matters as engagement of labour, accommodation for meals, recreation and training in a sense of responsibility.

By this time the reader is familiar with some of the attempts to solve one or other of these problems, and is well aware that provision for free medical treatment is almost universal in large concerns. With the exception of some of the mills in Southern India, dependants share this privilege. The great majority of the doctors are Indians. The equipment varies from the most meagre to a well-furnished dispensary and consulting room. Here and there a research laboratory is added and there are several private hospitals. One large firm in Bombay employ an anti-malarial staff in charge of an inspector to prevent the spreading of malarial mosquitoes in their compounds and chawls.

Mention has been made more than once of attempts to promote infant welfare, but progress is very slow, the suspicion and superstition of the people being increased by the influence of the *dhais*, whose calling as midwives is hereditary and whose vested interests are naturally threatened. Still, if we remember that the infant mortality rate rises in some places to 50 per cent and that 30 per cent is no uncommon figure, it is easy to understand the hold that this particular evil has on the public imagination.

Two of the best schemes in India are connected with factories near Calcutta.

One is at Kankanarrh (Jardine, Skinner & Co.) where 1,600 women work in the jute mills and 6,000 of the 9,000 mill workers are housed in the lines. A trained British health visitor is in charge of the well-built and cheery clinic which stands just outside the lines. Any expectant mother who has been for a year in the firm's employ and promises to attend the clinic regularly receives full pay for a month before and a month after confinement. Simple treatments are administered and the clinic works in co-operation with the mill doctor and his dispensary, the lady superintendent helping to smooth over many of the little difficulties that so easily arise with women patients in India. The ordinary inspections and classes are held and there are special classes for the *dhais*, attendance at each of which means the receipt of four annas.

In addition, they are given a rupee every time they call in the lady superintendent, to oversee their work at a confinement. This is assuredly a justifiable form of bribery! An appreciable improvement is recorded in the space of one year.

The clinic at Titaghur (Thos. Duff & Co.) is similar and dates from 1923. It is managed by an Anglo-Indian lady who was trained both at Delhi and Calcutta. She has had a long uphill fight against the suspicion and mistrust bred of ignorance and has sad stories to relate of lives recently lost, quite unnecessarily and after great suffering. She has not the same means of bribing the *dhais* as are at the disposal of her more fortunate neighbour, but though only about 1,000 women work in the mill to which she is attached, there is an average daily attendance of 30 at her attractive clinic. She does a great deal of visiting and coaxes the babies with tastes of honey and pop-corn, and their mothers with gifts of glaxo and virol and free materials to use at her sewing classes.

One cannot help thinking that it would be much better if these clinics served a group of mills, so that they can be staffed by at least two workers. The position is so exacting that no woman ought to be expected to face it in complete solitude, particularly if she lives over her clinic and close to the lines, and consequently at a little distance from the staff bungalows.

In this connexion a sensible way of showing appreciation of the interest of a manager in the welfare of his workers was shown recently at a factory in the Bombay Presidency. On his retirement, agents, staff and work-people contributed to build a maternity ward to commemorate his work.

Attempts to provide education receive some stimulus where local rules demand a minimum of schooling for half-timers. Adult education has often been tried and has not infrequently failed, but failure is likely to be lessened as provision increases. Opportunities for communal singing, wrestling and gymnastics are generally appreciated and often pave the way for more directly educational activities.

Housing, again, is provided in an enormous number of cases, and housing comes fairly under welfare, seeing that even where comparatively high rents are charged, the dwellings are rarely let at an economic rent. Some of them may be depressing in the extreme, but at least they are *generally* superior to anything that the workmen can obtain in the vicinity.

Grain and cloth at concession rates and supervised shops, restaurants and markets are other forms of welfare provision, and are especially valuable when run on more or less co-operative lines.

There seems to be a strong tendency in India to concentrate upon extra-mural forms of welfare activity, and this tendency is so marked that one sometimes finds the so-called welfare-secretary debarred from entry into the factory itself. This interest in outside work is perhaps natural in India, seeing that the factories are more or less modern buildings and governed by a comprehensive Factories Act. This means that the conditions that meet the eye within are apparently far more satisfactory than the personal and domestic conditions without.

A development peculiar to India is a readiness to delegate the welfare work to an outside organization, a method that has been steadily resisted in Europe. Thus we find different firms subsidizing the Y.M.C.A., the Social Service League and the Seva Sadan on condition that these associations supply the workers and take charge of the work.

Before discussing the subject further in general terms it may be interesting at this point to describe, shortly, some of the more comprehensive and well-known schemes at present in operation. They come from widely sundered places and must be taken as illustrative of the subject and not as an exhaustive list, although they are probably at the moment the most complete in India.

One of the best known firms in India is Messrs. Binney of the Buckingham and Carnatic Mills, Madras. They employ upwards of 10,000 men and boys, of whom about 5,000 are Hindus, 3,500 are Adi-Dravidas, 750 are Mohammadans and 750 are Christians. It is an unusual feature of this firm that 75 per cent of the workers are said to be stable and 35 per cent have a record of service of ten or more years. About 200 women are employed on the premises and they work only as building coolies. Probably in consequence of this, the boy half-timers are unusually numerous and number nearly 1,000. Recruitment of labour by jobbers is entirely of the past; there are more applications than vacancies. Normally, vacancies are filled through the firm's schools, where attendance is a condition of half-time employment and where there is always a waiting list for posts in the mill.

The schools were started in 1903, and remodelled about ten years ago. In the early years it was difficult to secure attendance and, still more, regularity; and parents withdrew their boys at the earliest opportunity. Now it is difficult to find room for all who come, and the workmen's sons, the half-timers and the 400 night school lads bring the total on the books to just over 2,000. The teaching staff are all Indian men, but the general supervision is entrusted to two English women.

Probably these schools are the finest of their kind in India. It is a wonderful sight to watch the early morning class drill, and both in school rooms and manual training departments there is a marked absence of the lethargy and monotony that are often found in Indian elementary schools. A large proportion of the boys make an attendance of over 90 per cent a year.

As soon as the morning drill is over, the delicate ones are weeded out and sent to the school canteen for milk and a light meal. Others needing treatment for minor ailments file up to the school clinic. The area set aside for school buildings and playgrounds is so large that there is no sense anywhere of overcrowding.

Schools for girls and infants are now being started in the mill villages.

The average wage throughout the works, including boys, is 27 rupees a month. Half-timers begin with 3½ annas a day, older lads earn 7½ annas; weavers make from 36 rupees upwards a month. It takes about a week to make up the books at the end of the month. As soon as this is done each worker receives a chit giving details of his account, showing earnings and deductions for fines, co-operative society credit, purchases from the food store, rent, repayment of advances etc. He thus knows exactly how he stands and there is an interval before pay day of two days during which he can, if he wishes, challenge the calculation. This system is held to reduce chances of unfair extortion to a minimum.

Average wages are paid for statutory holidays, allowances are made during illness, and workers of five years' standing and upwards have a right to 15 days a year privilege leave on full pay. Hours are from 6-30 a.m. to 5-30 p.m. with one and a half hour's interval at 11-30 a.m.

Housing is at present only provided for about 500 men who earn less than 32 rupees a month. The houses are rented at 1½ rupees and consist of one room with a good front verandah and a private yard behind. They are soundly built and are kept clean and in good repair. Large additions to the available accommodation are contemplated.

The most interesting feature of the welfare work in these mills is, however, the fact that most of it is more or less controlled by a series of committees centring round the Works' Welfare Committee. This has functioned in the present form for about seven years, but is in reality much older. Each of the four communities in each department, e.g., Hindus, Mohammadans, Adi-Dravidas and Christians, chooses a member from among their own number by secret ballot to serve for one year. Members are eligible for re-election, but although there are some who have served for several years, a governing caucus has not developed and there is increasing competition to secure seats.

The full committee meets about twenty times a year and two of the directors take it in turns to preside. The welfare secretary and certain other officers are *ex-officio* members. Sub-committees deal with complaints and departmental matters, prepare cases and decide what shall be passed on to the central committee.

The social activities that are supervised by the committees include the organization of the annual Health Week, and of the Athletic Association with its events and tournaments; special issues of cheap cloth are negotiated for the Christians at Christmas, for the Mohammadans at Ramezan and for the Hindus at Pongal. The workmen's food stores have a monthly turnover of 120,000 to 138,000 rupees, although issues of rice are rationed. The dramatic society is a flourishing institution and the literary and debating society is gaining in popularity, especially among the younger generation who have passed through the schools.

The work of the village committees has recently been overhauled and revised by the central welfare committee, the village halls are being increasingly used, and the work-people subscribe for daily papers to add to the newspapers and books supplied by the firm.

The co-operative society has been duly registered. One of the directors acts as superintendent, and there are over 450 members. Numerous loans have been granted and the agreed monthly repayments are deducted from wages.

The welfare committee often enters into negotiations both with the firm and with outside authorities. For instance, arrangements are made for local polling booths at election time, and grievances such as the reckless driving of motor buses or the illegal opening of a toddy shop in the mill area have been brought to the notice of the municipality. There seems to be full and frank discussion of many questions with the firm. Matters such as the protection of the people during a cholera epidemic, and the adjustment of pay-days to public holidays have been settled in this way and the management seem to give courteous and full explanation of their reasons when suggestions are not accepted.

It may be objected that this committee often occupies itself with things that would happen automatically in any well-conducted firm. It has been stated outside that there is much more discontent and petty injustice in the mills than is apparent, and that the accounts of advanced welfare work are exaggerated. The directors, on their part, maintain that the work of the committees is steadily improving, that frivolous complaints have almost vanished, that the men have developed in self-respect and a sense of responsibility, and that many small and easily adjusted grievances are brought to light instead of developing into serious causes of unrest. In any case, the work-people do not seem anxious to leave and it is obvious that valuable educational work is being carried on ; one wishes that many more firms would resort to the committee method, even if they can justifiably claim that their resources do not permit of welfare work on an extended scale.

Nearly all the mills in Sholapur have interesting welfare features, some of which have already been mentioned in discussing the cotton trade. The most complete organization is to be found in the mills of the Sholapur Spinning and Weaving Company. This is an Indian firm and employs about 8,000 people, including just over 2,000 women. The great majority are Hindus and the Hindu welfare secretary came straight from college about nine years ago.

A day school was started as far back as 1898, but in 1927 elementary education became free and compulsory in Sholapur City and the school was then devoted to the half-timers working in the mills, about 63 per cent of whom attend daily. There is also a beautiful little technical school. A night school on the premises attracts on an average thirty-six students and there is a smaller one in the city. The reading room is open every evening, but is used mainly by the clerical staff.

There is a full-time medical officer in charge of the dispensary. Special measures are taken in times of epidemic, when a voluntary staff is recruited from the workers to help in the distribution of free medicine and nourishment. In 1927 this staff included seven clerks and sixteen workmen in addition to the eleven members of the dispensary staff.

The three crèches care for about 160 children daily and are well-equipped and occupied by an unusually bonny little crowd. The clean white cots with their mosquito nets are a refreshing contrast to some of the equipment to be found in India. The kindergarten stands in a charming little park which is open to the work-people.

The restaurant is one of the few good ones in India and more than 1,000 of the employees use it daily. It is managed by a committee on which management, foremen (jobbers) and work-people are represented, and the food appears to be good and the arrangements thoroughly practical. Food is sold at cost price and credit is allowed up to 25 per cent of the monthly wage.

Wages are low in Sholapur, and the women earn about nine rupees and often less, the men about 15 rupees a month.[1] The district is, moreover, subject to all the fluctuations of a famine area. It is therefore the more necessary to make some provision for cheap marketing. The flour mill, the cloth shop and the co-operatively managed mill stores are further aids to this end.

In addition, most of the Sholapur Mills supply grain at what practically amounts to half price and if this is really a subsidy to wages and used to steady the labour supply and encourage regularity, it is a system that seems to suit local needs. The plan is to supply a fixed amount of grain to each worker, for which two rupees are deducted from wages whatever the market price. This was three rupees when the mills were visited, but it is said to rise to four rupees.

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[1] See Appendix

A beautiful little maternity hospital is not yet fully appreciated, but a peculiarly good institution is the hand-winding for pregnant women in the shady hospital garden. Here they can earn half wages on light work under the best possible conditions and they are saved from the solitude that is too often a depressing accompaniment to expectant motherhood.

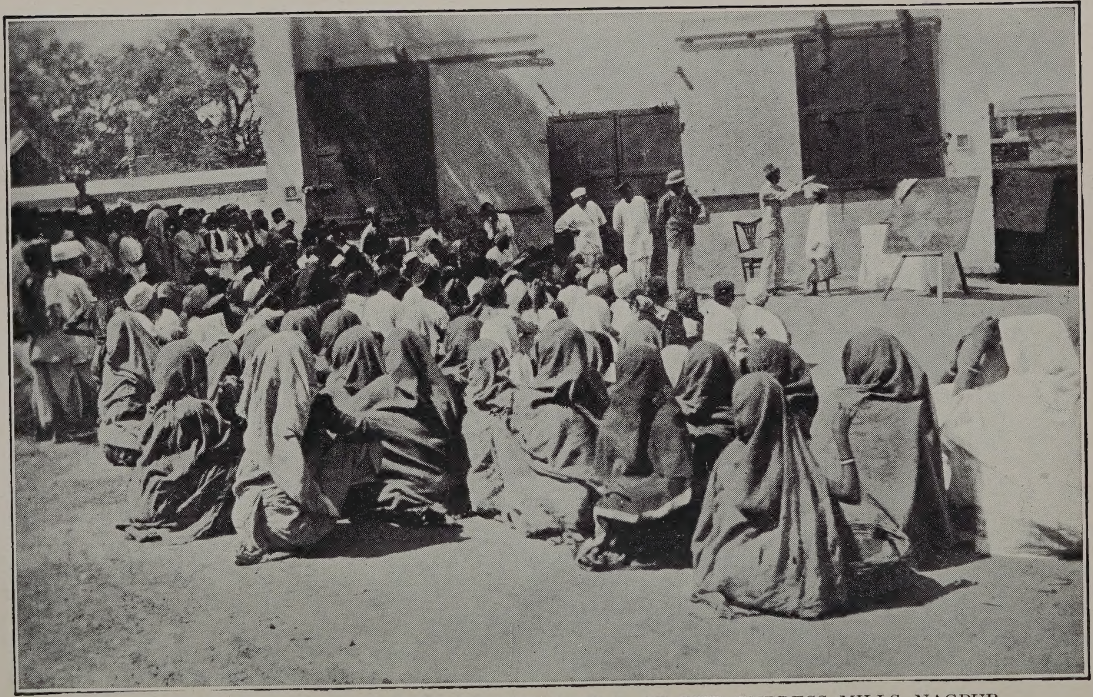
Many firms try with greater or less success to undermine the power of the money-lender. This firm began by collecting statistics from 1,767 spinners; 39 per cent of them were found to be in debt to an average extent of 200 rupees, or nearly a year's cash wages, and many of them paid about 25 per cent interest. A so-called Amelioration Fund was accordingly started, which made 81 loans in 1918 and 305 in 1927.

A loan may be as high as six months' salary; 6¼ per cent interest is charged and the principal is recovered by 6 to 18 monthly deductions from wages.

In a country where an enormous labour turnover is unfortunately the rule, it is a welcome change to find a firm where 22 per cent of the work-people have stayed with them ten years, while 10 per cent have a longer record and there are eight veterans with more than 40 years' service. These records are commemorated on the walls of the technical school, where anyone who has been ten years with the firm is entitled to have his or her photograph hung, the portrait being moved to a more distinguished position at the completion of every successive five years. This is a simple form of recognition that deserves to be more often adopted.

The Company house about 2,000 people in eight groups of chawls. A further 640 live in a criminal tribe settlement under the charge of the American Mission. They belong to that strange and elusive race of people who present such a curious and unique problem to the Government of India, but they seem to settle down fairly happily to mill work in Sholapur.

There are numerous further educational and recreational activities. 'The work was started with the object of improving



DINNER HOUR ENTERTAINMENT BY THE Y.M.C.A. AT THE EMPRESS MILLS, NAGPUR the habits and ways of living of the workers, as well as elevating their mental and moral outlook. . . . The difficulties encountered in this task are not few. Harmful customs, antiquated habits, ignorance and illiteracy all stand in the way of the amelioration of the conditions of labour by creating suspicion, prejudices and sheer inertia.' These words are taken from the firm's latest report. There have been many disappointments but successive reports indicate a slow but steady progress.

Another very interesting example of welfare organization has been introduced at the Empress Mills, Nagpur, another large Tata concern. Here the work has been handed over to the National Young Men's Christian Association, who receive a subscription from the firm and engage and pay the staff, who have no access to the inside of the mills. They work under a board of management, consisting of twelve members, half of whom are chosen by the management to represent the mills, and half to represent the general public.

The work is largely educational, and boy scouts, night schools, village lectures and classes and dinner hour entertainments are important features. The work-people live in congested quarters of the old city or in *bustis* (native villages) in the neighbourhood. In some of these, extra wells have been dug and there are wrestling grounds and halls where debates, music, etc., are encouraged under the management of the villagers. The village *panchayats* are responsible also for a good deal of improvement in the condition of the roads, and are responding increasingly to the call for responsible self-help.

The mills maintain a specially good medical service, which includes an enthusiastic Indian woman doctor who has made great headway in gaining the confidence of the women and of the local *dhais*, not only through treatment but also by educational work. In 1925, over 100,000 treatments of different kinds were given through the dispensaries and on an averge 341 patients were seen daily.

Crèches are provided, and two month's wages are paid as maternity allowance to any woman who is confined after not less than eleven months in the mills. Wherever married women are employed in any numbers, a crèche for small infants is a necessity in order that the mothers may feed their children, but provision for those of toddler age is usually equally necessary. A word of warning should be added, namely, that every crèche should be under trained care, on account of the danger of infection when a large number of small children are brought together, unless proper precautions are taken.

There are day and night schools and subscriptions are given to outside schools. Long service is rewarded by a small graded bonus on wages, and small pensions are granted to old workers and to the dependants of deceased workers who have been on the books for not less than five years.

The Co-operative Grain Store and the Credit Society are doing good business, but are not yet wholly independent of subsidy. About 2,500 workers have joined the Provident Fund and subscribe one anna per rupee earned. The firm adds a like sum and pays 6 per cent interest, and, though its contribution can only be drawn after 20 years' service, it can be inherited at any time should the subscriber die while in their employ. Such provident funds are to be found in many progressive firms, but too often they are utilized only by the clerical staff, and sometimes they are instituted for them alone.

Another unusual feature of the welfare work of the Empress Mills is the five years' apprenticeship scheme, which should do a good deal to de-casualize labour, and to raise the standard of work.

On the whole, however, perhaps the model village which is slowly coming into being is the most interesting contribution made at Nagpur to the welfare movement. Land has been leased by the Government and although some of the houses are provided by the firm, intending tenants are being encouraged as much as possible to purchase leasehold plots and to build their own houses, encouragement being given to family groups to take up adjacent plots.

The land lies on the slope of a low hill, and plans have been made for 1,500 houses, ample playing-fields, hospital, maternity home, staff houses, temple site, pavilion, etc.

Leases are for 25 years, with privilege of renewal for another 30 years, the term on which the land has been leased by the Government. If owners of five or more years' standing leave the mill service, they will not be turned out but will be charged water rate and an economic ground rent. (Similar rules apply to tenants of mill houses.) Otherwise, the ground rent per plot is six rupees a year or eight annas a month. The plots are sold on easy terms, and the mill authorities will loan money for building at 6 per cent and will also facilitate the purchase of materials.

The house plots are arranged in groups round central open spaces of about an acre in extent and buildings must generally lie 10 feet back from the road, thus securing 60 feet between opposite houses. Each plot is provided with a private water tap and water drainage and is large enough to allow for a garden. One or two specimen houses have been built with three rooms, a front verandah and a back one with a store place on one side and a washing place on the other.

There are certain restrictions on building, viz. the plan must be approved by the ground landlord, every room must have at least three square feet of window area and the height of the door must not be less than five and a half feet. The best houses in the adjoining village of Indora exceed this minimum, but even these are sometimes surrounded by the dwellings of junior branches of the family into which one must literally almost crawl, and when one considers the average dwellings of the neighbourhood, the plans for this village become almost revolutionary. Incidentally, the firm hope that their requirements may stimulate a house pride that will do something towards reducing loafing and absenteeism in the mills.

Plots can be sub-let by permission, or the ground landlord will re-buy. House tenants have a right to three months' notice, lease holders to six months' with the option of removing their houses or re-selling to the mill at an agreed rate of compensation. This is calculated to cover the initial premium, if any, plus 75 per cent of the cost of construction, the latter sum being reduced by 5 per cent per annum after the first five years of occupation to a minimum of 25 per cent.

Unsatisfactory residents may have their notices reduced to one and three months respectively.

This scheme has been described at some length, although it must still be seen mainly through the eye of faith, because it is one of the most constructive in existence. True, it imposes many conditions, but within this not oppressive modern frame-work, it leaves the people free to develop a community according to their own familiar methods and institutions, while bringing them increasingly into accord with modern standards.

Another pioneer employer gives his name to Kiloskarwadi, a small village on a wide plain set in a circle of low stony hills in the Deccan. Village and works alike owe their origin to Mr. Kiloskar, a rare combination of Brahmin and mechanical genius. In 1910 he had a cycle business on the outskirts of a city and was given notice to quit as his land was wanted for an improvement and factories were not favoured in the vicinity. In his anxiety he applied to a friendly rajah, asking for land near a station. The rajah put his finger on the map and said: 'You can have this' and the offer was accepted. Then the prospective manufacturer went to see it and he found himself on this plain of tolerable farming land, remote alike from fuel, water, raw materials, and markets, and withal alive with cobras. His first venture was an attempt to lighten the lot of the agriculturist by teaching him to use a simple metal plough in place of the inefficient wooden implement of his forefathers, a plough moreover made on modern mass production methods. The venture has succeeded, and ground-nut shellers, sugar presses, iron railings, and office and garden furniture have been added to the main industry.

The factory is simply a somewhat haphazard collection of open sheds, the power being supplied from an up-to-date engine house. Only about six hundred men and boys are employed. They are practically all agriculturists, but as the working day is only eight hours and twenty minutes, they have a certain amount of daylight for their fields, and they take occasional days off at seed-time and a longer holiday for harvest, which naturally coincides with a slack time in a plough factory.

A model village has grown up round the factory. Most of the houses are detached, and each one has its own electric light and water tap, although the water, which is brought from the hills, three miles away, must often be rationed during the hot weather. Gardening is encouraged, and there is a certain control of shop and market prices, a co-operative store not having proved a success. The well-built houses with their shady gardens, the tidy streets and the general air of neatness and prosperity form a striking contrast to the ordinary Indian village.

Mr. Kiloskar wants to do away with the difference between capital and labour by making everyone a capitalist in greater or less degree. He himself lives in an ordinary village house and insists, somewhat naïvely, that everyone who earns thirty-five rupees or more a month shall become a shareholder in the business. No alcoholic liquor is sold in the village and it is an understood thing that workers shall be non-smokers and non-drinkers. There is a compulsory primary school and a free medical dispensary. He is assisted by his son and his nephew, who were educated in Boston and London, respectively, before becoming associated in the business.

We may object that this venture is small and representative of an old-fashioned paternalism that has long been outgrown in the more advanced west. There may be truth in this indictment, but we must remember that Mr. Kiloskar is dealing with an undeveloped people among whom a paternalistic authority is the one best understood; that his venture, small to western eyes, is unique of its kind in India; and last, and by no means least, that he has been a pioneer in associating handicraft with Brahminism. In his workshops one can see a Brahmin and an Untouchable working side by side at a machine.

The Currimbhoy Ebrahim Workmen's Institute in Bombay is a welfare institution serving the Currimbhoy group of mills, eight in number. It was designed and endowed by Indian employers who gave it as their opinion that 'the manager of the mills should consider welfare work as important as production'. Initially, they also entrusted the work more or less to outside management, and the Social Service League supplied them with an organizer. After a time, however, labour troubles broke out and the firm severed the connexion with the society, while retaining the worker under the control of a supervising board consisting of the managers of the mills, the chairmen of the co-operative societies and the workers of the institute. 'The board generally meets once a month, inspects and directs the work of the institute, considers the important proposals of the works committees, controls and develops the working of the co-operative societies, sanctions loans above fifty rupees, and does such thing or things for the proper conduct of the institute.'

There are four centres and the staff numbers about thirty. The workers meet once a week to arrange programmes and discuss suggestions, difficulties of working, etc., etc.

The Institute was opened in 1918 and has developed rapidly in spite of the dislocation caused by a succession of strikes in 1924, 1925 and 1928.

'The membership stands at over 3,200. . . . Roughly stated, about 700 persons take advantage of the educational work, about 1,700 of economic work, about 400 of the recreational, about 200 of the maternity and child welfare activities and about 500 of the works committees.'

Much of the work follows the usual lines. There are crèches, a kindergarten school for half-timers and adults, clubs, sing-songs, libraries, debates and lectures. An interesting feature is the special work among women, including primary education classes, sewing and knitting classes, and a co-operative buying club. The women have a special association and share in excursions and other recreational activities, and they are being encouraged and trained to manage their own sections through their own committees.

The boys have their savings club, book-store and cricket club, and they celebrate a special 'Mothers Day' when 'the greatness of mothers and the duty of the children towards their parents' are explained to them. Another feature of interest is the attempt to redeem the Holi Festival from the objectionable features too often associated with its observance. Not only are about 5,000 pamphlets distributed 'advising the workers to refrain from filthy language and practices', but positive help is given by the organization of sports meetings and competitions.

Another feature of special interest is the organization and development of works committees. Here achievement is less important than the training in responsibility and orderly corporate action. Questions of wages and hours are excluded and perhaps the committees have not much real power. There is one for each mill, consisting of fifty to sixty representative members, with the manager as president and the officers as *ex-officio* members. Important proposals are referred to the supervising board or to the agents of the mills, but a good deal of useful discussion seems to take place and small grievances are often ventilated and remedied before they become dangerous. It is said that these committees at first acted simply as a vent for conspiracies hatched in the hall and that endless small strikes resulted. Their educational effect is, however, becoming apparent and procedure is now much more sensible.

Many other firms have interesting lessons to teach and possibly some day a general pooling of experience may be possible that would bring to light methods that have escaped attention. Experiments in connexion with housing are almost too numerous to mention. One of the most successful belongs to the British India Corporation in Cawnpore. The two mill villages are nearly thirty years old and are still far in advance both of general types and local standards. They are in charge of an American ex-missionary and have a population of over six thousand.

The houses vary in size and pattern, from the single workman's quarters at one rupee two annas a month to the staff bungalow at 17 rupees. There are some back to back quarters in the older village, but these are gradually being opened through and made, where possible, into double quarters.

Most of the houses have two rooms, back and front verandahs and a small private yard. Half of the front verandah can be bricked in for a small extra charge, if tenants desire more privacy, as most of them do.

In parts the ground is broken and undulating, and the roads are not all straight. Where there is level ground, the houses are so arranged as to provide a series of small squares, each with its shady tree surrounded by a broad seat. This plan provides space for children's play, drying grounds, etc., and a delightful absence of the deadening uniformity so characteristic of most mill villages. In spite of continuous alteration and improvement and the high standard of upkeep, there seems to be a fair chance that these villages will, in time, become self-supporting, barring, perhaps, the salary of the superintendent.

They are burdened with heavy initial costs, which greater experience hopes to avoid in the extensions which are imminent on a new and recently acquired site. The superintendent has plans for new houses on the above plan which will be self-supporting at a monthly rent of two rupees.

These calculations do not include the cost of all the extra welfare amenities such as medical care, clinics, schools, reading rooms, recreation clubs, crèches and hospitals. The schools especially are full of vitality, and it is said that there is no need to make elementary education compulsory for the children come readily. Adult schools are also encouraging and show a good attendance. There is a large Christian community, for the mills which were formerly shy of these converts now find them reliable workers. Mohammadans are also numerous, but communal disturbances have hitherto not arisen and there seems to be no reason to anticipate them. There are abundant places of worship in Cawnpore and therefore no sanction has been given for them on mill property since the time when the land was offered to the Hindus to build a temple and they refused. The recently acquired land is further from the city, so the question will again arise.

Elected village *panchayats* deal with organization, discipline, etc., and the power of self-government is growing.

Each of these examples of welfare schemes is unique in its way and one cannot deny that they are few and far between. They should suffice, however, to show that pioneer firms in India as in other countries are paving the way for the industrial reforms of the future, and this often in face of difficulties that may well appear almost overwhelming to the newcomer.

CHAPTER IX

PROGRESSIVE MOVEMENTS: II. SELF-HELP

1. TRADE UNIONISM

BOTH in the west and in the east the early stages of the so-called welfare movement have been violently assailed by labour leaders on the ground that it is detrimental, if not deliberately in opposition, to the principle of self-help, especially as expressed in labour organization or trade unionism. There is doubtless some justification for the belief. In the rather far past, in England, advantages were sometimes offered deliberately in exchange for trade unionism. In certain unorganized trades or districts in America employers frankly hope to make trade unionism unnecessary. There may have been, and possibly are, similar instances in India. In Great Britain opposition has been allayed by the fact that modern welfare tends to stimulate organization. The growth, slow as it is, of committees in connexion with welfare in India is giving an education in corporate action that will pave the way for trade unionism, should the awakening class consciousness of the Indian labourer lead him eventually to develop in that direction. Meanwhile, trade unionism has a foothold in India, and, in spite of difficulties besetting it both from without and within, it is by no means a negligible factor in the industrial situation.

Like the modern industrialism that has called it into being, trade unionism is a newcomer in the east. Its short history there has been chequered and stormy, and the obstacles that at present surround it and obscure its future development from all confident prophecy are not by any means wholly those that are common to the early stages of the movement in other countries. Some of them are peculiar to India and others are due to the difficulty of translating western forms into methods comprehensible to eastern thought. In addition, the antagonism born of nervousness and strengthened by a disbelief that they can be so translated, exists among employers in India as it does in other countries, even if it cannot be said to be general.

When trade unionism was emerging into life a century or more ago in Great Britain, it was faced with a bitterly hostile government that was elected on a very limited franchise. This was possessed entirely by a class that was profoundly fearful of an aftermath of the French Revolution on English soil. Legislation was brutally repressive, individualism ruled economic thought, the mass of the people were desperately poor and a large majority were illiterate. Protective legislation was practically non-existent and industrial conditions were at their worst, a worst scarcely conceivable to the modern imagination.

In India the Government is cautious, but it is not hostile. The franchise is limited, but it is not an exclusive class franchise. There is nervousness, but it is a nervousness of things much more complicated than a repetition of the French Revolution, and it is not a fear of the working classes as such. As far as they are concerned, it is a fear lest they be used and exploited for political ends, and, as far as organization is concerned, lest they be brigaded for this purpose through their own associations. The mass of the people are desperately poor and an even larger proportion of them are illiterate than was the case in England. Legislation is not perfect, but it is modern and designed to protect them, and cases of scandalous factory conditions are few and far between. There are grievances in plenty and the conditions under which the mass of the Indian people live give a rude shock to the stranger; but the way is open for them to help themselves, thanks perhaps to the hardly won achievements of their fellows in the west.

According to Mr. Joshi, 'the real beginning of the trade union movement in India was made in 1918', although there were isolated attempts at organization from 1905 onwards; from 1918 to 1920, the cost of living rose rapidly, wages in the east as in the west failed to keep pace, and the general vague unrest that succeeded the Great War fanned into flame discontent and misunderstandings over the whole world. It was about this time that the trade union idea captured the imagination of a number of young Indian patriots, most of them inspired by the Gandhi crusade. Some of them even abandoned unfinished college careers to throw themselves into the great cause of labour uplift. We are not discussing here the political aspects of their work, or of their associates. Our concern at the moment is with the small group who are doing genuine social work, showing much the same spirit as that which inspired the beginning of the settlement movement in England in the 'eighties. They have been much helped by the foundation of the International Labour Office in Geneva and by the fact that Labour representation at the successive International Labour Conferences practically depends on organization. On the other hand, politicians have not been wanting who were ready to exploit to the utmost the rising spirit of demand and self-assertion among the labourers. Strikes were frequent and many of them were spontaneous and often for undefined reasons. Some of the politicians were genuinely seeking what they conceived to be the welfare of their country or of the oppressed classes. Others were mere carpet-baggers, who appeared where unrest was expected or active, fomented disturbance, brought themselves into the prominence they desired, and have not been unknown to depart with the proceeds, leaving their followers sometimes despoiled and certainly leaderless and helpless.

The Indian Trade Unions Act, 1926, was the governmental attempt to regularize the situation. Its purpose is to protect the legitimate trades union movement, giving it status and definition and disentangling it from the political propaganda that, not only in India, may easily obscure its real purpose and mar its usefulness. The Act also seeks to protect the Indian labourer from the fraud and deception that can be too easily practised on an illiterate and superstition-ridden populace.

The Act provides for a Registrar of Trade Unions in each province. Any seven or more members, who have signed the rules of a trade union, may apply to him for registration. They must give the name and address of their union, their own addresses and occupations, the names and addresses and occupations of the officers of the union, and an exact statement of accounts if the union is more than one year old. These statements must be renewed, with any necessary corrections, once a year.

The rules must also be submitted and must provide that the union has a name, of which the Registrar must approve as unlikely to cause confusion with any other union that has already been registered. That name may be changed by the vote of two-thirds of the members, but any change of title, address or rules or any amalgamation must be registered without delay, and no such change can absolve a union from liabilities that may have been contracted previously.

The rules must further state the full purposes of the union and provide for the maintenance of a list of members and facilities for its inspection by officers and members, the admission of ordinary members, who must be at least fifteen years of age and actually engaged in the trade, and for the admission of honorary or temporary members. These latter need not be engaged in the trade, and, unless the proportion be varied by special order of the local government, they may fill one half of the offices of the union, provided that the other half of the officers are actually engaged in the trade and no officer is less than eighteen years of age.

Methods of election and removal of officers, of variation of rules and of a possible dissolution of the union must also be defined.

Lastly, the rules must provide for the keeping, inspection and audit of accounts and must clearly state the whole purposes to which funds may be applied and the terms of benefits, fines and forfeiture. The purposes are limited by law to the following :

(1) The salaries and expenses of officers and of administration, including audit.

(2) Legal proceedings concerned with the protection of the rights of the union, the conduct of trade disputes or compensation to members for loss arising therefrom, or with a dispute between a member and his employer or persons employed by him.

(3) Allowances to members or their dependants on account of deaths and funerals, old age, sickness, accidents, unemployment or insurance policies relating thereto.

(4) The provision of educational, social or religious benefits for members.

(5) The upkeep of a periodical mainly for discussing questions affecting employers and workmen as such.

(6) Subscriptions to allied causes, which must not exceed one quarter of the income for the year up to the date of the subscription and one quarter of the credit balance at the beginning of that year.

As in Great Britain, a trade union may have a political fund for election expenses, political meetings and the distribution of literature and no member may be compelled to subscribe or victimized for not subscribing.

Having satisfied himself that the application is genuine and that all the prescribed details are in order and after calling for such other information as he deems necessary, the registrar then registers the trade union and issues a certificate, but he may cancel his action on application of the trade union or if he proves fraud, cessation of activity, the illegal rescinding or retention of rules or any other contravention of the Act. He must give two months' notice and the union or its members have the power to appeal.

A trade union is not liable for the acts of its agents done without the knowledge of the executive or in contravention of its orders, and officers and members are immune from prosecution for the acts described commonly and collectively as ' peaceful picketing '.

The position has recently been somewhat modified by the Trade Disputes Act, 1928, which combines certain of the provisions of the British Industrial Courts Act, 1919, and of the Trades Disputes and Trade Unions Act of 1927. The possibility of such an Act was first discussed in 1920, when public anxiety was aroused all over the world by the industrial unrest that followed the conclusion of peace. It was not considered at that time that legislation for the settlement of industrial disputes was likely to be effective, but the growth of organization and the increasing influence of public opinion on the course of disputes in succeeding years led the Government of India to reverse this conclusion and to introduce the new Bill.

The first part of the Bill gives the Government power to set up Courts of Inquiry and Boards of Conciliation to deal with any dispute. Both are able to compel the attendance of witnesses and the production of evidence, and the appointment of a Board of Conciliation is not contingent upon the agreement of the parties concerned, although, as in England, neither party is under any obligation to accept the findings of the Court or the advice of the Board.

The second part of the Bill makes sudden strikes in public utility services illegal, i.e. one month's notice must be given by persons working for monthly wages in the postal, telegraph and telephone services, in any industry or business supplying light or water to the public or any system of public conservancy or sanitation, and to any railway service or other industry or business which the Governor-General in Council may, after due notice, 'declare to be a public utility service for the purposes of this Act'.

It is hoped by this means to secure time for the examination of grievances and the preservation of public health and safety in case of threatened disturbance to the provision of the necessary amenities.

Thirdly, there are provisions relating to illegal stoppages, whether strikes or lock-outs, and these clauses are almost identical with the provisions of the British Act. They are applicable only to stoppages which have other objects than the furtherance of a trade dispute within any industry or industries and which are designed to coerce the Government either directly or by inflicting hardship on the community.

'If these conditions are satisfied, the strike or lock-out becomes illegal. Persons furthering the stoppage are liable to punishment and are deprived of the protection granted to them by the Indian Trade Unions Act, while persons refusing to take part in it are protected from trade union disabilities to which they might otherwise be subjected.'[1]

It is impossible at the moment to predict the effectiveness or otherwise of this legislation. Something of the kind is clearly necessary and may stimulate legitimate trade unionism by helping to defend it from agitators, who too often gain control of a union that has made a good start and use it for political purposes after ousting the leaders and misleading the rank and file by their specious promises.

This legislation has regularized the position of trade unionism and given it a chance to develop, disentangled from extraneous interests. It helps the genuine labour leader to get a fair chance, be he working man or one of the social enthusiasts, who may be prone to economic mistakes, but of whom it has been truly said that it 'would be stupid to alienate their class while waiting for workers' representatives to mature'.[1] It also enables the employers to discriminate between real leaders, however temporary, and the justly feared political agitator who, whatever may be his merits, has no legitimate place in a definitely industrial dispute. As a general rule, recognition by the employers depends on registration, a wise precaution when one considers the numerous mushroom growths that have hindered the development of a wise unionism in previous years.

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[1] A. C. McWatters, *The Trade Disputes Act—A Statement of Objects and Reasons.*

The All-India Trade Union Congress, founded in 1920, has 59 affiliated unions, with a membership of 125,000. There are, in addition, a fluctuating number of unaffiliated societies, and it is estimated that there are in India about 100 real trade unions with 146,000 wage-earners as members, exclusive of the 50,000 who belong to the organizations of Government employees.[2]

The movement is strongest among the literate postal and railway workers, the latter having twenty-five unions with a membership of about 50,000. The eighteen textile unions come next with 30,000 members, seamen have six unions and 20,000 members, motor and coach drivers four, and Port-Trust employees and tramwaymen two each. There are two unions of jute workers, with an aggregate membership of about 2,000. It will thus be seen that the trade union idea has penetrated into a variety of trades and is therefore in a sense widespread in India.

It is also clear that the movement is still so small as only to touch the fringe of the industrial population as a whole. On the other hand, its concentrations in certain important industrial centres have enabled it to exert a strong influence on various occasions and to undertake important educational work. Omitting agriculture, domestic service and Government employ, but including transport and tea, coffee and other plantations, it is estimated that the potential unionists of India number today upwards of four millions. At present about four per cent of them are organized, and, even among these, there are

[1] Messrs. Purcell and Hallsworth.

[2] These figures relate to 1927.

many who have as yet apprehended but dimly the real significance of their movement. Organization is everywhere difficult among agricultural workers, of whom there are about 25,000,000 in India. It may be that the constant coming and going between field and factory may make it easier to organize them in India than in other countries.

Looking once more westward and reading the longer history of a movement wholly western in its origins and expression, we find that there has been a long and slow progress of education. It depended at the outset largely on the craft nature of the unions, which drew in the artizans, who, by the very nature of their callings, had the higher intellectual development. It kept them also in comparatively small allied groups, with common interests and often a common knowledge of business prospects from the employer's as well as from their own point of view. They early conceived the idea of using their unions as mutual benefit societies, thus drawing in waverers to whom what one might call the spiritual impulse of unionism made little appeal, and holding them fast in times of stress and strain by their share in the vested interests of their organization. Of course, these very interests ended by giving the unions a tremendous power over their members, and their most ardent supporters cannot claim that these powers have invariably been wisely used, especially since the mass movement, or industrial unionism, has brought in the labourers. Safety lies largely in the fact that education and experience preceded this mass movement.

Still, whatever its defects and whatever its mistakes, no one doubts that trade unionism has been a marvellous educative force in Great Britain. It started in a country where '49 per cent of the boys and 57 per cent of the girls of 13 to 14 years old could not read and 67 per cent of the boys and 88 per cent of the girls could not write '.[1]

It laid hold on the religious imagination of working men who were also making a fight for education. It captivated their sense of spiritual values and made them call upon those same values in their fellows. It trained them in loyalty and disinterested service and administration and it taught them to suffer for an ideal, and this spiritual heart of the movement led their women-folk to stand by them unflinchingly in spite of privation to themselves and, far harder to bear, to their children. There have been material successes in plenty. Many of them, from a financial point of view, have been too dearly bought to be economically sound propositions, but if the heart of a man or a movement remain sound, the mistakes and crudities of past and present may be surmounted. When all the mistakes, injustices, petty tyrannies or adherences to outworn creeds and shibboleths that can be laid to the charge of British trade unionism are taken into account and weighed in the balance, few thinkers will deny that it has made a wonderful contribution to the evolution of the British democracy, that it has helped in large measure to secure the advances that have been made towards a more reasonable standard of living and that it has become a valuable and essential part of our present economic organization.

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[1] D. H. Macgregor, *The Evolution of Industry*.

The east is fond of accusing the west of an over-mastering materialism. Over and over again the history of trade unionism has given the lie to this assertion. In it the British working man grasped an ideal thanks to which he has constantly sacrificed material gain to principle, and safety to the welfare of his colleagues.

Now what of the movement in India? The population is more illiterate and more inflammable than it was in England a century ago. It is divided by race, creed, language and caste. Disinterested enthusiasm exists, but it has not behind it the driving force of a religion that rightly understood is essentially altruistic rather than individual. Corporate saving for possible future benefits makes no appeal to the average Indian labourer. His education has not yet reached so far and he has not as yet realized the desirability of education. He is fettered by a creed that teaches him to accept his present position and disabilities. Trade unionism, withal, is essentially western; yet there are many reformers, European and Indian, who are mostly drawn from the groups who look with suspicion upon everything from the west as, at its best, being unlikely to fit eastern mentality, and they continually assert that in trade unionism lies the one hope of the Indian labourer. Contrary, too, to western experience 'most of the unions of India have adopted a structure based more on industry than on craft. . . . It is not suggested that the trade unions in India have deliberately adopted the industrial structure in preference to the craft structure, but it was so adopted on account of the fact that a large number of the unions have been started by local efforts made for improving conditions under a common employer. But, on the whole, the choice is a wise one and is in accordance with the modern tendencies in the trade union movement in the world'.[1] There is probably truth in this, but it does mean that Indian trade unionism is losing the early stage of intensified education that characterized the movement in the west It also means, however, that the skilled and unskilled are being drawn into common groups and that, in consequence, the latter are enjoying at the outset chances that were long delayed in England, and this in spite of the much greater divisions among them.

On the other hand, some of the unions are not behind in adding social and educational work to their more immediate functions.

Quoting once more from Mr. Joshi: 'The main object of a trade union is to protect the interests of the employees when they come into opposition to those of the employers. Besides performing this chief function, trade unions all over the world have also acted as mutual benefit societies'. This second object is being very slowly realized in India. 'The activities of the unions are so far confined to attempting to secure the redress of the grievances of their members by making representations to their employers. There are hardly any, except perhaps half a dozen, unions financially strong enough to render any monetary help to their members during a strike. . . . There is no union in India which has yet made a beginning of paying either sickness or unemployment or superannuation benefits. There are some unions which have started a death benefit fund.'

Progress along these lines is not likely to be rapid. The Indian on strike has more resources than the Britisher, in that he can so often retreat to his village home. His tendency is to expect the Government to do most things for him, and governments all over the world are beginning to make some provision for the aged, the sick and the workless. The chances are therefore distinctly against his turning his union into a benefit society, thereby cementing as well as educating the membership and ensuring its stability. One of the greatest difficulties of the present situation is the ease with which an agitator can step in with easy promises of immediate benefits and the difficulty with which a genuine labour leader, to use an old-fashioned phrase, can maintain his hold upon his followers and train them in the real meaning of trade unionism. The leaders are not all agitators. There are men among them whose meetings are almost like a class in trade unionism, as they straighten out debate and handle the various complaints, showing how one can be remedied by the law, another by organization, why another must wait because the union has made no provision for dealing with such contingencies, and why yet another is outside the scope of union activity altogether.

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[1] N. M. Joshi, M.L.A., *The Trade Union Movement In India*, 1927.

In addition to this educational work, some of the unions carry on various social activities.

The Madras Labour Union was founded in 1918, and resuscitated in 1926. The nominal membership is 7,500, the paying membership about 5,000. This union has busied itself in trying to reduce the number of physical assaults in the mills and in giving free legal advice to members, particularly in regard to compensation claims, the rule being to deduct 2½ per cent of awards for administrative expenses. They have a reading room and co-operate with a local society in working a most successful infant welfare clinic in their back premises. There are also the beginnings of scout and rover troops, and of death benefits to members and maternity benefits for the women working in a local mill where these are not paid.

It is in Ahmedabad, however, that the trade union movement is strongest and most developed. There are five craft unions among the cotton textile workers, but ‘even in their case, their craft character is greatly modified by all the unions having a common office, a common president, and a common secretary’ (N. M. Joshi). Estimates as to the proportion of the local labour force enrolled vary between 15 and 18 per cent.

Ahmedabad is a city of many surprises. The sister of one of the leading mill-owners is president of the unions and a mill manager has organized strikes. When asked how the social activities of the unions can possibly be carried on when such a trifling subscription is demanded from the members, the answer is that 70 per cent of the union income is devoted to this side of the work and that this is augmented by subscriptions from the mill-owners, who in 1928, contributed 15,000 rupees (£1,125) to the schools. The union maintains two dispensaries and a hospital, eleven day schools and sixteen night schools with an average attendance of sixty each, a library and reading room, a weekly paper, two cheap grain shops, a loan fund at 6¼ per cent interest, a savings bank and a research department. The staff also come forward to assist in relief measures at any time of local emergency as, for instance, when the floods in 1927 rendered hundreds of people homeless. An interesting feature of the work is the department for negotiating complaints regarding municipal matters, such as defects in street lighting, water supply, sanitary provision or taxation. In the schools, 'attention to the physical condition of the children was given a special place in the time-table of every class and makes an important feature of the year's work in day schools. Continued endeavour to cultivate the habit of regular bathing and scrupulous care of teeth and nails met with marked success'.[1] A visit to some of the schools shows that this is not a vain boast. The union is rightly proud of the fact that depressed class labour makes great use of the facilities provided, for despite all provision and assertion to the contrary these unfortunate folk are often barred in practice from access to public and other institutions.

The union is also building for the future. A small boarding school for village boys aims at training the leaders of the next generation, and a similar school for girls is maintained by the lady president.

Here and there in India one finds unions within a particular firm. This is easy to understand at a place like Tatanagar, where the whole town depends on one firm and there is practically no local alternative employment. In another place

[1] *Report*, 1925.

it signifies a secession from the local union, and in a third a desire to go ahead of halting local organization. These works unions are officered by working men, and are recognized by the firm for negotiating purposes, provided, in one case, that they do not infringe on matters that are properly the concern of the Works Welfare Committee. The labour leaders outside assert that these unions are the creation of the employers and used to frustrate the legitimate movement, and cases of persecution and victimization are freely cited. The employers, on the other hand, state that these unions are spontaneous and entirely outside their influence, and that they do not interfere with them in any way, beyond making it a condition of their recognition that they shall be conducted in a seemly manner, and in accordance with the rules that they have themselves drawn up and submitted when asking for that recognition. It is very possible that many of the petty injustices complained of by both sides are the result of friction between individuals for which neither set of union leaders is to blame. Probably, as the general movement strengthens and wins the confidence of the men, these works' unions will become merged in it and tend to disappear. At present, an account of the movement in India is incomplete without some mention of them and unfair unless the opinions of both sides are stated.

Trade unionism has so vast a work before it in India that no movement that contributes, in however small a degree, to an understanding of its principles should be looked on as wholly a hindrance. Time will show whether the awakening genius of the Indian workman will express itself through this western form or whether he will mould it into something more indigenous. Whatever happens it is to be hoped that India will not, in her zeal for the national, cut herself adrift from international movements of industrial and social reform. Meanwhile, another western movement has taken even firmer root among the masses of the people and it also has been regularized by legislation.

2. Co-operation

The co-operation movement was not primarily concerned with industrial reform. Its great object in India is to strike at the evils of money-lending at exorbitant rates of interest and to teach the people to help themselves through thrift and mutual support. Incidentally the liability of all the members of a society for the debts of the individual is helping here and there to secure a juster balance between expenditure on the ceremonies for which debts are so largely incurred, and the possibilities of repayment, thus striking at one of the roots of village poverty. As with trade unionism, the movement has a chequered history and there have been many instances of fraud and disappointment. The Government now insists on registration and an official supervision of accounts, and spurious societies should eventually be weeded out. Making all allowance for disappointments and disillusionment, the progress of the movement has been so remarkable in India as to lead to the belief that here at least is something that is related to the Indian mind and outlook.

'Starting from nothing in 1906, it has in 20 years achieved a record of 71,608 societies with 2,630,000 members, handling a capital which . . . approaches five crores of rupees (50,000,000 rupees or about £3,500,000).'[1] The movement is still progressing. It has always been chiefly concerned with the provision of cheap credit facilities, and in many regions that is its only function. Its career as a distributive agency is not very hopeful. In places, however, it is concerning itself with production, and it is here that it touches the sphere of industrialism. Quite naturally, it has begun with the home worker, and some of its activities are concerned with the maintenance of trades that appear to be dying out.

The most varied developments are found in Bengal. In this province there were in 1927, 12,819 societies, showing an increase of 15·6 per cent on the previous year, and 453,031 members, giving an increase of 17·4. The movement has practically doubled in six years and the same is true of the capital that it owns. The Government Registrar has on his staff 75 inspectors and 98 auditors and is asking for large increases. Nearly 90 per cent of the societies are credit societies pure and simple. The remaining 10 per cent offer a curious and instructive variety, showing the diversity of ways in which the Indian tries to utilize its principles.

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[1] K. T. Paul, *The British Connection with India*, p. 171.

By the co-operative sale of jute, paddy (rice), hand-woven cloths, and above all of milk, the agriculturist hopes to free himself from the incubus of the middleman who is often a money-lender in disguise. There are 350 irrigation societies and at least one embankment society, which help to maintain a level in production. More than 70 milk societies, 90 per cent of them independent of all financial aid, combine in the central milk union in Calcutta to furnish that city with pure milk treated by modern methods.

The milk union is prosperous enough to undertake some of the educational work for which co-operators have always been famous. Schools are aided or maintained, tube wells have been sunk, dispensaries built, stud bulls are imported and maintained and the raising and conservation of fodder is an important item in its programme.

The industrial unions are on a small scale, but they are interesting as showing a line of advance that has hopeful possibilities. They are concerned both with the marketing of products and the supply of raw materials. There are societies of conch-shell workers, of embroiderers (chicon-workers), fishermen, silk cocoon rearers, silk reelers and weavers, shoe-makers, carpenters and toy-makers, and there are several factories, the most important being a power-loom factory at Bagerhat.

Government help is often given for a limited period to enable an industrial venture to find its feet, but naturally the aim in every case is to achieve self-support.

It seems to the outsider as if there might with advantage be much more frequent co-operation between factory organizations and the co-operative movement. For instance, one manager imported a fine bull in order to assist the work-people to obtain better results from their cattle. The scheme was a failure, and yet, in the vicinity, the co-operative milk union is experienced in dealing with such matters and could probably have turned failure into success.

There are a number of co-operative credit societies in mills; thus, in one group in Bombay, there are 19 with a membership of about 2,000 and a share capital of about 50,000 rupees. In the town and island of Bombay, 64 out of the 72 registered credit societies are connected with mills, but success seems to depend more than it should on the interest of the management.

There are also a number of co-operative grain and other stores, and in one Bombay mill a co-operative restaurant is proving a success.

Still, only a very small proportion of the operatives are touched by the movement and one wonders whether, especially in the jute lines, much more might not be accomplished by definite co-operation with the office of the Registrar of Co-operative Societies. When a society depends on a personality, however inspiring, and be he manager, welfare officer, teacher or missionary, it so often languishes and dies directly that stimulating influence is withdrawn, either temporarily or permanently. This shows the difficulty in making a movement inspired from above become part of the life of the people. The staff of the registrar often undertake propaganda work, and it is at least possible that they might be able to secure more continuity.

This suggestion must not be thought to underrate the considerable success that has been attained in some quarters. It is made because that success is in no way commensurate with the problems involved, the good that might be achieved, or the effort that has been expended in the past.

A great deal has been published on the two subjects discussed in this chapter, which makes no claim to treat them exhaustively, but only to show that, though comparatively small, both movements have an important bearing on the industrial situation. Both have made false starts and have had to retrieve mistakes, but they are alike gaining in influence and popularity, and let us hope in the public respect that should do much to ensure their future usefulness.

CHAPTER X

SOME OUTSTANDING DIFFICULTIES

IN the course of describing some of the chief factory industries various difficulties have been mentioned. Some of these belong to the universal problems that the International Labour Office must help to solve, seeing that industrial advance is immensely complicated when a progressive country has to run the gamut of every kind of bad condition among competitors. Other difficulties are germane to the country of their origin, and it is with these that we are more particularly concerned here. In so far as India, in defects and in progress, is simply following where others have already passed, the way of reform should lie open, the only question being how best to adapt methods tested elsewhere to the peculiar circumstances of India.

The law, as it stands, is not perfect, and certain amendments will be suggested in the next chapter, as part of the great field that lies waiting for a more widely diffused and systematic welfare movement.

We are concerned here with some of the difficulties that stand in the way of that welfare movement and make many managers and agents unwilling even to consider its feasibility —'It may be very well elsewhere, but it would not act in India.' The would-be reformer hears that phrase with wearisome reiteration. Sometimes it expresses genuine doubt, born perhaps of long experience and repeated disappointment. Sometimes it is used as a cover for negligence and apathy. Sometimes it is delivered in a single sentence. Sometimes it expresses itself in half an hour's oratory! No one who is at all conversant with Indian history or with Indian working class life in town or village can fail to sympathize with the hesitation expressed, and it is useless as well as unfair to attempt to underrate the difficulties of the situation.

Perhaps the least of these is the instability of the industrial population. It militates against efficiency of work and is one of the factors, but not the only one, that militate in some trades against the production of the higher classes of goods. It is also an obstacle to housing reform. On the one hand, it seems inconceivable that anyone could consider some of the housing provided in the light of a permanent home ; on the other, the knowledge that few will so consider it tends to maintain the present standard. Sometimes the conservatism of the people themselves blocks the way.

An amusing example of this was found in connexion with one factory where the manager had gradually rebuilt all his lines except one section. Here lived the Madrassis who were his only really permanent labourers. They had old-fashioned mud huts in a long row and had decorated them within and without with their favourite designs. They had improved them with earthern ramparts and platforms, and absolutely refused to have them rebuilt or altered in any way.

At the same time, the migratory habit is far from being an unmixed evil, and as long as the Indian mills can find a sufficient market for the classes of goods in which they chiefly specialize at present, the alternation between town and country life is probably a source of strength both to the people and to the country. It hinders the growth of a purely urban population with all its limitations of outlook and of physique. It affords refuge in sickness and old age and decreases the devastating results of economic crisis and widespread unemployment. It may, in the future, prove a valuable asset in bringing education and hygienic knowledge to the countryside. At the moment, however, it creates many problems both in town and country, not the least of these being the obstacle it offers to the growth of a stable and instructed trade unionism.

One of the great troubles of Indian factory life, indeed of all Indian life, is the prevalence of bribery and corruption. Everyone agrees that the people are too poor, but many forget that they are far poorer than they need be.

Where the system prevails of depending on the foremen and forewomen for the recruitment of labour, it is naturally very difficult to prevent their exacting a payment before the recruit starts work, but even where all labour is engaged direct by the management, the supervisors in the mill itself constantly contrive to maintain their perquisites. In addition, there are payments for certain classes of jobs, tolls on wages, fees to dispensers and other officials, and periodical presents to various people. This must not be taken to imply that all these forms of extortion exist everywhere, but all of them have been met with, and almost every manager interviewed acknowledged that the evil existed in his mill and expressed himself as powerless to stop it. When discovered, the delinquents are often severely punished, but if the present jobbers are dismissed, any new ones are likely to be just as bad. The people also acquiesce and often bring their offerings before they are asked. Sometimes they complain, often they are afraid to do so, and the dismissal of an offender may even cause a strike among the people whom the manager is trying to protect. It is perhaps fair to add that where wages clerks are concerned, the firm often suffers more than the work-people, and one manager ruefully remarked that there was something to be said for the clerk who, when taxed with dishonesty, cheerfully replied: 'And how do you expect a man of my intelligence to live on forty rupees a month?' Naturally, the acquiescence of the people in this form of oppression is closely allied to their undeveloped mentality. The writer was one evening in a trade union meeting and commented on the fact that the members did not mention this evil among things they wanted to see remedied. The reply of the (Hindu) organizer was: 'You see, most of the members of this branch are Mohammadans, and they are better educated than the rest and do not suffer so much from bribery and corruption because they simply will not submit to it.'

The evil may be classed among the causes of secondary poverty among the Indian labourers. It is closely allied to the various forms of extortion which keep the agriculturist poor, and by robbing him of a large share of the produce of his labour drive him to seek employment in the cities. He arrives poor and expects oppression, and on the whole perhaps he gets less of it than he does in his village home. Again, he does not leave behind his facility for getting into debt, and if he must wait five to six weeks for his first wages he must live on credit for that period, and credit in India invariably means a high rate of interest. Very often his foreman becomes his creditor; sometimes it is a shopkeeper or money-lender outside. In any case, there is no reason why the mill authorities should not evolve some method of avoiding this form of indebtedness and it is their clear duty to do so. It is less easy to cope with debts contracted in the village home or arising from the social obligations to which the Indian is a willing slave. Here he is his own enemy, and he is not infrequently shy of the facilities for escape offered by the mill; yet it is constantly said that one reason why the Indian is so fatally easy to exploit is that he is poor in body and in mind, undernourished, underdeveloped and illiterate.

It is very probable that the slowly diminishing customs of child-marriage and of purdah affect health among the depressed classes in far less degree than in higher ranks of society. Wherever we have child-motherhood we have a potent cause of physical degeneracy, but at least the labouring woman has a healthy outdoor life which is denied to her richer sister. The Indian woman tends to age early, but there are many stalwart and well-developed women factory workers, although, alas, they can hardly be said to represent the majority. It is notoriously difficult for Europeans to insure good health in the east, but it is not generally so fully recognized that the natives of the country are no more immune from its dangers than are the Europeans. They suffer quite as heavily from malaria and from the debilitating condition vaguely described as 'fever'. Their overcrowded living conditions make them even more prone to cholera and plague. They are attacked far more frequently by ankylostomiasis (hookworm) and by kala-azar. The influenza epidemic of 1918 swept off nearly 6,000,000 Indians. It is being realized that tuberculosis is a widely diffused scourge and anæmia among the labourers has long been dreaded.

There are as yet no statistics to enable us to deduce the influence of caste, occupation, housing and diet upon the incidence of disease, but in the light of modern knowledge statistics are not necessary to show that tuberculosis is bound to flourish among women and girls condemned to purdah in the small and often sunless premises usual among the upper working and lower middle classes, and that even without purdah the housing and sanitary conditions prevalent in city and village are a direct encouragement to epidemics, even after making all allowances for the disinfecting properties of the Indian sun.

It is often asserted that the further east one travels, the earlier do the young people reach maturity, but recent medical opinion tends to the belief that this difference between east and west has been exaggerated. In any case, motherhood before the age of sixteen cannot produce healthy children, especially when it is remembered that the infant welfare movement has as yet affected an almost infinitesimal minority of the births in the country, and even if, as some doctors maintain, the average Indian woman passes through this crisis with greater ease than the westerner.

There is a theory that the Mohammadans, Sikhs and some of the hill tribes owe their better physical development to the fact that they are not vegetarians. On the other hand the Parsees do not practise purdah, vegetarianism or child marriage, but they are not a rapidly increasing community, in spite of their comparatively high standard of education. While to some people the average Indian diet looks almost unendurably monotonous, others maintain that it has been evolved to suit the country, and that the same is true of national dress, agricultural methods and, above all, of the dominant religions and the observances that they enjoin.

There is undoubtedly something to be said for this point of view, and what might be called mass Christianity is still too young to enable contrary conclusions to be drawn, but the reformer may surely plead for a rationalizing of the ancient customs that shall bring them, where at all possible, into line with modern knowledge. To give some small examples: everyone admires the *sari*, but in some places it is nine yards long and it generally depends on a tight waist line. The small bodice worn underneath in most parts is healthier among the Tamils, where it has loose sleeves, than among the Marathis, where it impedes the action of skin and glands. Children's dress in some respects and places leaves little to be desired, but small girls should not be condemned to long skirts, again dependent on a tight waist line. Rules for bathing and the regular washing of garments would be a great safeguard if religious rites would secure the holiest waters from the pollution of corpses and disease. It is very possible that vegetarianism is a perfectly sound way of life especially adapted to hot countries, but science demonstrates that vegetarianism, as practised by many Hindus, is deficient in fats and other life-building elements.

Still, let us remember that the generation is not yet old in the west that has borne the burden of initiating the infant, child and factory welfare campaigns, and those who took part in them have vivid memories of the opposition, ignorance, not to say superstition, that had to be met and overcome. The last thirty years have made an almost unbelievable difference to English standards, and the records and reminiscences of reformers in the middle of the nineteenth century seem to take us back to the middle of the dark ages. Surely this alone should give good hope for India, in spite of her vast population and the acquiescence in things present engendered by centuries of the caste system and fostered by the prevalent belief that all amelioration should come from the Government.

These words cannot be written by anyone who has studied these questions in India without two answers literally ringing in one's ears, 'What can you do with an illiterate population?' and 'India is so poor'. To say the very least, the backwardness in these important respects must seriously delay the progress of this great country, but the success of the anti-malarial societies in Bengal that are working under the wing of the co-operative movement prove that India need not wait for literacy in the ordinarily accepted sense, however essential this may be. The intelligent interest shown by the peasants in health exhibitions and demonstration trains may be remembered as an offset to many disheartening experiences. On the other hand, students who try to start adult education classes in their villages during the long vacation have been known to complain bitterly of the apathy induced among the boys by unwholesome living. This problem cannot be discussed here but it must be given its place among the factors adverse to giving the industrial population that fair start in life that the most advanced factory conditions cannot hope to replace.

Again, this is also not the place to discuss the drink problem in any detail, but, in spite of religious inhibitions, there is abundant reason to suppose that it is a very serious evil. It may be that it is more local than universal, but, where either drink or drugs have a hold on the people, the vitality of those regions shows a general depression. It is unfortunate, too, that this problem is entangled with politics, and that the argument of revenue considerations versus prohibition obscures the health aspect. The difficulty really lies deeper, for while apparatus is cheap and natural supplies are abundant it would tax the ingenuity of any government to prevent the illicit manufacture of rice-beer or toddy.

In the east as in the west the drink evil is partly a result and partly a cause of poverty. Considering it in the latter aspect, we are face to face with another and less frequently asked question. This time it is not 'Why is India so poor?' but 'Is India really so poor?' Some enquirers confess to a deep scepticism on this subject.[1] Climatic difficulties and disasters are undoubtedly great, but India is a sub-continent of extraordinary potential riches. Irrigation is adding to the area of her habitable land, science to the fertility of her soils and the productivity of her forests. Transport and organization are equalizing her resources and robbing famine of much of its terror.

Government taxes are lower than in most countries, and as prosperity increases revenue should increase and the advantages of education and civilization become more widely diffused. Yet India remains on the whole poor and it is asserted that millions of her population are always more or less hungry. It is much easier to make the statement than to discover the cause. There is an enormous amount of unproductive hoarding of money, whether as buried cash or in the form of jewellery. The results of indebtedness are far more complicated than a simple liability to pay interest so extortionate that it may involve conditions very nearly akin to slavery. It often mortgages crops before they are harvested and condemns the producer to accept the most disadvantageous market. The touring agent and middleman are other factors in beating down prices at the source. A mere raising of factory wages would not obviate these troubles. It might even intensify them. This, however, is no argument against securing to labour a fair subsistence wage. Rather the securing of such a wage would give a basis from which to attack the other causes of poverty.

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[1] See Appendix IV.

One of the difficulties in the way of securing this basic standard is the want of exact information as to standards and economic facts. Economic researches and surveys are, however, becoming the fashion and it may be that the next ten years will see the accumulation of enough reliable material to enable a fair judgment to be formed as to what is both needful and desirable. At the moment, the investigator must rely on scattered data of varying reliability.[1]

A small research committee working in Madras estimated in 1926 that the minimum family cash wage should be 23 rupees a month. This figure might very possibly hold good for the whole of South India and perhaps for the United Provinces. In Bombay and in Calcutta it should be increased by at least five rupees, and probably by seven in Bombay, owing to high rents. In Bengal, outside Calcutta, the lower figure might stand as far as workers housed in mill lines are concerned, as they generally pay only a nominal rent.

In Assam, the desirable money income has been estimated at about seven to nine rupees a month, and it is said that most independent ryots fail to secure this.

While deploring the low standards of remuneration prevalent in many districts and industries, it is only fair to remember that whole classes of workers exceed this modest standard. Weavers on the power loom are almost invariably above it, and where both man and wife work in a mill there is a chance of comparative comfort. The same is true in most departments of engineering, and very often in the match and jewellery trades, and it is true to a large extent in the tea industry. There are, however, multitudes in Southern India who earn 15 rupees a month, while male labourers outside the factories have five to eight annas a day, and women both within and without organized industry from three to six annas. At the same time whenever arguments are advanced for a higher rate of payment one is met with the reply that higher wages would only mean less work. This has been heard often enough in England and even there has frequently been urged with some measure of justice. It has, however, proved to be a matter that speedily adjusted itself. It has applied especially to girl workers, but they have generally been quick to grasp the pleasing potentialities of more spending money and, where the demands of their work have not previously been unfair or excessive, they have soon reverted to the wonted rhythm of work and play. The argument has far greater cogency in India. The standard of the labourer is so low, his wants are so few and his ambition is so non-existent, that the fear of increased rates producing a lessened output is quite justifiable, as can be realized when one hears that in some places managers have even tried to induce extra interests through free cinema shows, etc., in order to stimulate earning. It is ~~only~~ fair to mention this fact, but once again it must not be construed into a justification for a wage that makes anything but a low standard of mentality and physique an impossibility.

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[1] See Appendices.

Another difficulty lies in determining the standard at which we should aim. Science can guide us to an efficiency standard: a diet not deficient in fats, sufficient clothing and bedding to suit the climate of the locality, housing superior, it may be, to the home standard and a surplus to meet the social obligations that are a guarantee of status and a requirement of religion. Beyond this minimum we enter the realm of controversy. Why induce wants and a love of luxury to mar the beautiful simplicity and abstemiousness of the Indian peasant? This argument comes from the more educated Indian and must be treated with respect in view of the extreme simplicity that so often satisfies him and the ease with which he can make himself independent of creature comforts. However, at the moment the need is to secure a bare efficiency standard. That once attained very probably we can safely leave the labourer to choose his own directions of expansion, and if his ideals prove to be less materialistic than those alleged to possess the west, then India will be making a great contribution to the ethical progress of humanity. There is no ethical virtue in the enforced abstinence that exists at present and it is at least open to question whether there is any divine content about an absence of ambition that is simply acquiescence in the conditions attached to one's birth by the doctrines of caste and *karma*. One of the strongest factors in the advance of civilization has been the ambition of parents to give their children a good chance in life. It is precisely this instinct that is crushed out among the depressed classes in India, thus helping to perpetuate poverty and the low standard of living.

The question of illiteracy is very closely connected with poverty and the difficulty of disentangling primary from secondary or unnecessary causes of poverty, but we may perhaps derive some comfort from remembering that in England the foundations both of factory reform and of trade union organization were laid long before the coming of universal compulsory education. It is beginning in India, but progress is slow and it may be generations before the whole country is covered. There are a great many village schools and, although Christianity makes slow advance in many parts of India, in others it is increasing rapidly, and with Christianity always comes some attempt both to provide education and to train teachers. There is great difficulty in ensuring a sufficient supply of teachers, particularly for remote villages, where the life must of necessity be lonely and missionary spirit is essential to success. The profession is very poorly paid and the difficulty of the situation is enhanced by the circumstances of Indian life, which make it almost impossible even for two Indian women to live alone, whether as teachers or health visitors. In some places the missions try to solve the problem by giving a certain amount of pastoral training to the wives of their divinity students and this practice is found very helpful.

Then again, there is in India a growing distrust of the usefulness of a so-called literary education, and any reform that tended to further deplete the ranks of manual work by adding recruits to the present army of educated and semi-educated unemployed would be lamentable indeed. Probably in the beginning education must not be primarily literary. The people want to understand how to increase the yield of their cattle and their land, how to utilize the waste products of the countryside, how to lessen unnecessary toil by simple adjustments of tool and apparatus, and how to lessen physical suffering. They cannot proceed far along any of these lines before the value of a knowledge of reading and writing becomes apparent. This whole subject is bound up with the larger issues of reconstruction and may seem to be outside the scope of the present survey. The illiteracy of the factory worker is however due to the illiteracy of the village, and compulsory education in the cities would possibly solve, on a very liberal estimate, one-half of the problem. However, all sections of the educated population are becoming increasingly alive to the dangers inherent in present conditions. Technical schools and farm schools are increasing in number and there are many experiments in so-called 'village uplift'. A particularly interesting one is carried on by the Y.M.C.A. at their Rural Reconstruction Centre on the outskirts of Coimbatore, South India. The association is a centre for the co-operative movement and conducts courses and also gives visiting instruction in spinning and weaving, dyeing, poultry-keeping, bee-keeping and new methods of agricultural work. The *Report* says:

'No scheme of rural reconstruction is worth putting into effect if the educational need of the villager is ignored. With 95 per cent of the rural population steeped in ignorance no progress could be aimed at. To meet this dire need a few prospective night school teachers were trained at our centre for the important work of teaching adults as well as boys in the quickest possible time to read and write Tamil (the local language) and to do simple arithmetic.' A method has been elaborated of teaching reading with the help of lantern slides and it is claimed that an adult scholar can become proficient in six weeks. The flourishing dramatic club supplements the night schools by a series of representations, both in the theatre at the centre and outside, the lads often dramatizing for themselves historical and Biblical subjects that have struck their imagination. The dramatic method is also followed with great success in the Telugu country in connexion with the schools centred round the Indian Christian Mission at Dornakal.

Of course all these endeavours are but as tiny showers on a parched desert, but even so they are one and all signs of hope and eloquent of a new and imaginative approach to an ancient problem. Another sign of hope is to be found among the people themselves. Let a group of them be gathered together in village hall or trade union branch meeting. At first the regular spokesmen, who are generally of a different class from themselves, will say the usual things and perhaps recite the usual grievances. Then let a few questions be put about the technicalities of their work, even through an interpreter, and faces will light up and tongues be loosed. A few minutes will show who are the potential leaders among the men. There is abundant evidence that the necessary material is not wanting, if only education and training can come to the rescue and fit these natural leaders for the work that is waiting for them. There are special colleges for such in England and America, as well as special educational associations and university extensions. There is talk of a Labour College in India. If it can be kept free from political encroachment and racial bias, let us hope that the scheme will soon mature.

This is, however, taking us into the domain of to-morrow, and there remains one great problem to be briefly mentioned before leaving the subject of outstanding difficulties, namely, the question of industrial unrest.

The present time is not normal; industrial unrest is a menace almost everywhere and in the great cotton centre of Bombay it is a positive peril to industry. Representatives of all parties agree in ascribing this situation largely to political and alien influence and regarding it more as part of the world-Communist agitation than as directly caused by industrial relationships. At the same time, the fact that political agitation has found a fertile soil for its propaganda among the industrial population should lead to a careful scrutiny of their conditions. The situation is extraordinarily difficult for all concerned, and there is abundant evidence that honest attempts are being made to clear it up. During the past twelve months a large measure of agreement has been reached on many disputed points, some being solved by discussion and others through the mediation of the Strike Enquiry Committee, under the Chairmanship of Sir Charles Fawcett, I.C.S. Among the documents submitted to this committee, were proposals for standardization of rates, and of Standing Orders for operatives, the Seventeen Demands put forward by the Strike Committee, and a scheme for increasing the efficiency of the industry, i.e. for bringing down the costs of production.

Re-arrangements and additions to the proposed Standing

Orders during the sittings of the committee brought the number up to twenty-five. Thirteen of these emerged from the discussions without substantial alteration of substance; three were amended in favour of the employers; seven in favour of the operatives, being made either more elastic or more equal as between Capital and Labour. In three others procedure was unaltered, but fourteen days was substituted for twenty-eight as the agreed period of notice of leaving or of discharge from employment. One was amended to provide for joint consultation before any except purely departmental rules could be changed, and the last, regarding the question of spoilt cloth was redrafted but left in a very tentative form. (One or two of the orders are long and complicated and are therefore included in more than one of the above categories.)

Ten of the Seventeen Labour Demands were granted outright by the Millowners' Association, two more were upheld by the committee, and two others were adjudged to be fair or reasonable, three more being allowed in part only. These figures show that beneath the surface disorder there are leaders on both sides who are animated by a spirit of reason and fair play; and if once practice on rules, leave, etc., can be standardized, potent causes of unrest will be done away.

The question of wages is of course far more difficult. The standardization scheme proposed to lower some rates and to raise others which were held to be unduly low. No one wants to accept a reduction, but it cannot be claimed that those proposed would have brought the workmen affected within the range of an inadequate standard of living, while the unions claimed that the advances proposed for certain classes of workers would not suffice to raise them out of that position. After much joint consultation, 'the main proposals in the scheme . . . were accepted, subject to some general objections and some qualifications'.[1] The controversy then centred round the proposed cut of 7½ per cent in the wages of the weavers, and the sections of the scheme dealing with efficiency or rationalization, which gave rise to a general fear of unemployment. The Committee of Enquiry did not adjudge the proposed cut to be unfair, but gave a strong recommendation that it should be dropped if the labour leaders would undertake to co-operate in working the proposed standardization scheme, of which the operatives are exceedingly shy.

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[1] *Report of the Bombay Strike Enquiry Committee, 1928-29*, p. 88.

The Fawcett *Report* says: 'The part of the standardization scheme, which is called the "rational" or "efficiency" system, and which aims at reducing the number of operatives employed in mills, while raising their wages and providing conditions favourable for the extra efficiency expected from the operative is also held by us to be fair and reasonable'.[1] Again: 'We have held that the objection taken by the Joint Strike Committee that it imposes an undue strain on the operatives concerned has not been sustained and that the improved conditions essential for the proper working of the system are fulfilled in the case of the mills that have adopted it in Bombay'.[2]

Great insistence must naturally be laid on the necessary adaptation of conditions. Whether or not the Indian is capable of working as his competitors in other countries do may remain to be proved. At any rate he is not in the habit of doing so, and it is only just and fair that the transition to more intensive methods should be made as smooth as is humanly possible to him. Adjustments of hours, rest periods, opportunities for refreshment, distribution of work, etc., etc., may vary from mill to mill, but such adjustments will most certainly be needed. At present, the men have arranged matters in such a way that the majority of them can take on a neighbour's work in addition to their own for a longer or shorter period. That is going to be much more difficult, but it is also difficult to believe that the men can mind extra machines all the time for ten hours a day without an allowance for rests that might seem excessive in Lancashire. It is very probable that they have abused the liberty granted to them when competition was less, but, in the interests of both parties a *via media* must now be found.

Technical details can only be settled by experts. If the constructive spirit that has brought both sides to agreement on so many of the rules and rates will animate them in this respect also, a really difficult problem should be solved.

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[1] op. cit., p. 166.

[2] op. cit., p. 170.

This constructive spirit will need all the help it can secure from a sympathetic public if the political, alien and communal elements in labour unrest are to be conquered. The men have adopted the strike habit with fatal ease. The Strike Enquiry Committee was appointed on the 13th October 1928, and reported on the 14th March 1929. During this interval 'even though the agreement of the 4th October 1928 constituted a truce in hostilities, such as lock-outs and strikes, no less than seventy strikes of this nature took place during the proceedings of the committee. . . . The present greater uncertainty as to when a lightning strike may take place in a mill necessarily disables its management in many ways, e.g., in accepting large contracts, and the workers themselves will surely benefit by progress towards the stage now generally reached in Europe, where discussion and an attempt at settlement . . . are almost necessary preludes to a strike or a lock-out'.[1] The suggestions that the trade unions should combine to secure the services of an expert technical adviser and that some arrangement should be devised to keep the two sides in touch in times of quiet so as 'to prevent discontent accumulating' would probably benefit other trades as well as the cotton industry.

It may, however, be doubted whether a technical settlement on the lines outlined by the Bombay schemes will do more than remove obstacles in one trade to that deeper agreement and confidence that are cardinal needs of industry all over the world. What is wanted is an inner agreement that will look on no arrangement as final, but will view the present in the light of the coming mentality of the near future. In all countries a sense of disharmony in life underlies the outward causes of unrest and provides the soil on which they thrive. This is illustrated in India by the fact that out of 531 strikes from the years 1914 to 1922 very nearly half were unconnected with questions of payment. It is also clear from the facts that considerably more than half these strikes were unsuccessful, that very often the operatives can give no clear reason for striking, and that some of the reasons given are altogether trivial and often contradictory.

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[1] op. cit., p. 151.

He would be a bold man who would attempt to define categorically and exhaustively the reasons for the nervous tension that makes such things possible for any country, and perhaps most of all for India, but one or two points have emerged either from recent happenings or in the course of this survey which may be briefly mentioned.

First, the people are afraid of unemployment and for this reason they have violently opposed re-organization in the railway workshops as well as in the cotton industry. Unemployment is less terrible in the east than in the west, owing to the close connexion between industry and agriculture, but 'in a group of nine mills, a total of about 5,100 men were retrenched from a muster of, approximately, 27,000 as a result of the introduction of the efficiency system during the past three years. . . . This does not necessarily mean that every one out of the 5,000 men remained on the unemployment list, although . . . there must have been some hardship caused to a portion of them, particularly the skilled workers.'[1]

This is an all too familiar story and it is one that always causes unrest out of all proportion to its magnitude at any given moment. There are very few industries that cannot and ought not to make some provision for such contingencies. Changes in method are rarely introduced suddenly, and if they are spread over a period of time, some hardship is averted by not replacing men who leave, and for others alternative employment can often be found. It ought to be a point of honour not to throw out skilled workers who have given their best years to attaining and practising a skill that is no longer required. Younger men and the unskilled can be helped to migrate and to learn other work. The Fawcett Committee propose a joint unemployment fund from which a gratuity could be given to any man dismissed in the cause of efficiency to help him to tide over a period of unemployment. Such a plan would not alone solve the difficulty, but it would do much to allay mistrust, and if the Bombay cotton industry acts on the suggestion it is to be hoped that their example will be followed far beyond the boundaries of India. In the meantime, the industry in Ahmedabad is extending, and may materially relieve the situation by welcoming men displaced from the Bombay mills.

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[1] op. cit., p. 159.

It has been remarked in Bengal that a great many men leave their wives and families at home because a decent Indian woman will not live under conditions that make privacy impossible. Her English sister will heartily agree with her! So much has been said already about housing that no enlargement upon this point is necessary. No very elaborate arrangements are needed to secure to the poorer families the amount of privacy that they deem essential to decency, and it is both unfair to ask them to live without it and unreasonable to expect a man to like his surroundings when he is cut off from all natural ties.

In any case it is difficult enough for him to accustom himself to city life. Agriculture entails hard work and long hours, but even so, it is less exhausting than the discipline necessary to working in a crowd and to a set and unvarying programme. The Indian is uprooted from the social obligations and sanctions of village, family, caste and religion. Such a change is difficult enough for an educated man. It is far more dangerous for the primitive Indian even if he comes into the company of friends. It is small wonder that he often falls a prey to the worst that the city has to offer, that old restraints are loosed before new ones have developed, and that the elders of his home community complain that he goes back spoiled.

Industry cannot bear the sole blame for this state of affairs. It is partly inherent in the circumstances of the case, but more might be done to give the men something in return for that which they lose. The sense of self-government and responsibility for the commonweal that they bring from the village should be a valuable asset to industry. On some tea-gardens and in a very few factories they find a *panchayat* or committee system waiting for them which at least gives a link with that past to which they desire to return as speedily as may be. Here again, no rule of procedure can be suggested. We can only call upon the kindliness that undoubtedly exists to study more carefully the home conditions and to exercise a greater degree of sympathetic imagination.

This brings us to the last point in an overlong chapter. It is rarely recognized how often industrial strife springs from a clashing of personalities that fans into a flame minor discontents that might have been easily adjusted. India is again no exception in this respect and such individual causes seem to operate quite as freely under Indian as under European management. In such a clash the workman may often be the most to blame; the difficulty may arise with a foreman and the manager may have nothing to do with it. However this may be, the management have the power that comes from position, as well as the knowledge, character and work that have given them that position, and therefore to them again must be chiefly made the appeal for the sympathy and imagination that can minimize the source of disharmony, even if it fails entirely to remove it.

PART III

TO-MORROW

CHAPTER I

TO-MORROW

THIS brief survey of conditions in Indian industry might be prolonged almost indefinitely, and, if the reader who has some previous acquaintance with the subject lays down this little book with the remark that 'the half has not been told', the writer will be the first to agree with him. But some time or other, we must make up our minds to end description and complaints and to ask the more cheering question 'What next?'

Many people are ready with answers. Some will say, as they are saying in other countries, that the old system must be swept away, that capitalism and reform are incompatible and that a fresh start is needed on entirely different lines. Another party agree, but they ask us to go back to a so-called golden age when machinery was not, to reverse the wheels of time and live again in the old simple and primitive way. (They do not say whether we are to do away with the modern means of transport that make it possible to fight famine!)

Then between them comes the great mass of people who, whether by instinct or by reason, believe in a more orderly progress. History has shown that attempts to arrest it are doomed to failure. History likewise makes them suspicious of sudden and violent upheavals. The pity is that so many are content to leave it at that, to accept the present, and, if it does not press too hardly upon them, to condone the failures and mistakes that are in part a heritage from the past and are often the result of failure to prepare for the near future before it becomes the present. There remain a minority who, while shunning extreme counsels, are keenly concerned for the future. It is to this minority that this book is especially addressed, to a minority who believe that we can best prepare for the future by mending the present, by watching for impending developments, and by preparing for them and understanding them, guide them into channels of service to humanity rather than let them become instruments of oppression. It is in the hope of aiding such readers that impressions are now collected to enable proposals to be made for reforms, some of them small in themselves, but all needed to clear away unnecessary obstacles to the coming of a happier future.

The first question that arises is the possible need for further legislation. Excellent as the Factory Acts are, there are certain gaps that might with advantage be bridged.

The English rightly cling to their national custom of making Saturday a half-holiday and a claim for the English week-end has often figured in Labour programmes on the continent of Europe. Outside Bengal, it is customary to take advantage of the legal weekly limit of sixty hours to work six ten-hour days, and even if it be claimed and with justice, that the operatives rarely work for the full ten hours, it may as fairly be urged that one reason against their doing so is the length of the working week. A much shorter week is the rule in some of the large industries, but to ask for a general ratification of the Washington Forty-eight Hours' Convention would be unpractical, as making too sudden a change, and unfair, in the face of conditions in competing countries. Probably too, the workpeople in the cities would need to be educated by degrees in preparation for such a step and would at present resent any such drastic interference with their customs. It is, however, reasonable to suggest curtailment to a fifty-four or even a fifty-five hours' week, which would bring Indian and British legislation more into line. Such a curtailment might result in the adoption of a nine-hour day instead of a weekly half-holiday. This would, in the opinion of many people, be an advantage; but, if the half-holiday were adopted, it is quite possible that a longer weekly rest might result in an increased efficiency that would not be without its favourable effect on production. It would almost certainly be a great boon to the European members of the staff and probably also to their Indian colleagues in managerial positions. Naturally, in the future as in the past, special provision will be needed to meet exceptional demands, especially in the seasonal industries. The old evil of time-cribbing is a grievance in some places, and needs to be sternly repressed by the inspectors. Probably the trade union officials would be their best helpers in detecting the evil.

Under Indian law it is possible to work a six hours' shift, and though the five hours' shift is general, it can be exceeded. Experience in England tends to the belief that even five hours without a definite rest pause is too long to be economical, and it seems quite fair to claim that the usual practice in India should be stabilized as the legal maximum.

One very real danger in India arises from the exemption from the protection of the Factories Act of any work-place, whether using power or not, in which less than twenty people are employed. Some of these places are brought under inspection by Provincial rules and more might be included. The occupiers are also liable to prosecution for negligent conduct with respect to machinery under the Indian Penal Code, but, in the absence of compulsory notification and inspection, the majority of accidents can easily be hushed up. All the old abuses such as dark and ill-ventilated work-places, unhygienic conditions, unguarded machinery, absence of fire escapes, etc., can and do occur in these small and unregulated workplaces and there is little protection against infection. It is very difficult to conceive of any effective means of regulation that would cover them all, but many of the worst conditions could be remedied if the Factories Act were made to include work-places where ten or more, instead of twenty or more, were employed on any one day in the year. This would also bring many more work-people within the operation of the Workmen's Compensation Act and ensure some supervision over great numbers of rice and oil mills. The work-places without power are equally bad and are often terribly overcrowded; but, under present conditions, to attempt to bring them also under regulation would be so herculean a task that it would probably be unwise even to attempt it until the influence of better conditions in the factories has exercised a sufficiently educative effect to make the work-people themselves demand more considerate treatment.

The complete absence of a Truck Act is surprising, and the situation should be carefully watched. As far, however, as payment in kind is concerned, there is no evidence that the employer abuses his liberty in this respect. There may be abuses, but they appear to be infrequent, and the various 'concessions' met with in different trades and districts were always for the benefit of the work-people and never to the profit of the employers, unless, indeed, it could be argued that they were cheaper than a rise in wages.

Still, *under present conditions*, it is probably wiser to show the workman how to raise his standard of life than to give him extra money before he has been educated in wise spending. This must not be taken as an argument for perpetuating present conditions indefinitely. It is only a plea to the more advanced friends of labour not to prematurely upset the status quo, which appears to be serving the needs of the moment.

On the other hand, some clause is wanted to the effect that 'fines and deductions must be fair and reasonable and must be entered in a register to which the inspector has access', even though, apart from certain complaints about deductions for spoilt work, there were remarkably few assertions that fines were excessive. The trouble can, however, occur and perhaps does so more often in outside undertakings such as tramways than inside the factories. The Millowners' Association in Bombay volunteered in their Draft Standing Orders that the total amount of fines inflicted in any one month should in no case exceed two per cent of the operatives' total earnings for that month.

The main objection made by the labour leaders to this Standing Order was 'that the system of fining an operative as a punishment is inadvisable and should be abolished', a view which is held by many on both sides of the table in England. Even Labour opinion is not unanimous on this point in India. Thus, in answer to a recent Government questionnaire on the subject, both the Ahmedabad Textile Labour Union and one of the larger and more extreme unions in Bombay gave the opinion that the employers should retain the right to fine in the interests of discipline, owing to the present low level of education and of intelligence among the work-people. The committee concurred in this view.

In addition, the millowners proposed to add that all fines should be utilized for the welfare work of the company. This was expressed more explicitly by the committee and the wise proviso was adopted that only departmental heads should have the power to inflict fines.

All this applies only to Bombay, but if such orders become the rule in that important centre of industry they will be urged elsewhere, and pending legislation on the subject it is most desirable that there should at least be district uniformity of practice in these respects.

One important qualification must be added if social reformers are to press for amendments to the law. The offices of the factory inspectors are often understaffed and, if extra work is to be undertaken, an increase of the inspectorate would be imperative. It is already badly needed in some provinces and it would be quite impossible for further duties to be added unless more help is allowed. It must also be noted that there is at present (1929) only one woman factory inspector in all India, and that she is a doctor working on specific problems and not trained for factory inspection as such. Writing in 1927 on this point, Lady Chatterjee says:

'The appointment of an adequate number of women factory inspectors is especially necessary in India. . . . Men inspectors are very severely handicapped in the discharge of their duties as they are confronted by an impenetrable barrier of shyness and so cannot ascertain from the women themselves any disadvantages or drawbacks under which they may be suffering. Further, the Workmen's Compensation Act, passed in 1923, cannot be properly administered without the help of women inspectors. . . . Many of their (i.e. women's) injuries go unreported, and because they have no one to explain to them the provisions of the Act they frequently forgo the benefits to which they are entitled.' Again: 'The needs of children, especially girls, will not be properly safeguarded until a certain number of women doctors are appointed as certifying surgeons'.[1] Surely it is not too much to plead that there should be one woman inspector in each large industrial centre, and that such appointments should not be made an excuse for shelving the claims for more male help wherever these are urgent.

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[1] *N.C.W. News*, October 1927, art. by Lady Chatterjee, O.B.E., M.A., D.Sc., 'Indian Factory Workers,'

At present there seems to be no recognized preparation or qualification for the post of inspector beyond certain technical examinations. One wonders whether some day a system of six months' exchanges between Great Britain and India might not be organized. Inspectors in both countries have to face many of the same problems, but the British inspectorate has a longer experience and, on the whole, a broader grasp of the possibilities of the office.

Inspectors from India can rightly claim that they set a high standard and that there is much wise elasticity in their methods. Even so, the variety of work in some British districts might be a valuable preparation for dealing with problems that are likely to arise in the near future in India, in connexion both with new areas of industrialization and the introduction of new industries.

The question of low wages has come up repeatedly in previous chapters. It is probable that, before long, the Government of India will have to consider whether or not to ratify the Minimum Wage Convention passed at the International Labour Conference held in Geneva in 1928.

Under this Convention each ratifying country undertakes to create and maintain machinery to fix minimum wages in trades or parts of trades (including commercial occupations) in which no arrangements exist for the effective regulation of wages by collective bargaining or otherwise and wages are exceptionally low.

Each ratifying country is perfectly free to decide to which occupations the machinery shall apply and also the nature, form and methods of such machinery. It must, however, provide for consultation with employers and workers, and for their assistance, in equal numbers and on equal terms, in its administration. It is recommended that special attention be paid to trades in which women are ordinarily employed and that there should be some independent members who are not associated with the trade concerned.

Minimum Wage legislation of some kind is already in force in seventeen countries, counting as one each Canada, Australia and the United States, with twenty-six different laws between them. In six countries the system is only applied to home industries, in two to agriculture, and in one to public utility services. Probably both the experience and the method obtaining in Great Britain are most nearly akin to the Geneva recommendations and to the possibilities of useful development in India. In Great Britain, as in many other countries, the original idea was to deal mainly with homework, but from the first regulation was based on process rather than locality and factories therefore came within its scope. Under present conditions in India homework could not possibly be efficiently regulated, unless in dealing with strictly local trades under local administration. For example, slipper-making in Calcutta or lock-making in Aligarh are both trades that are carried on in a limited and well-defined area and might perhaps be susceptible to such treatment, but universal trades such as tailoring, *bidi*-making or weaving would be almost impossible to track and register in the congested areas of a large city or the outlying districts where they could easily take refuge.

In view of foreign competition, fluctuations of trade, etc., employers are always nervous of legislative interference with wages, and they can generally rightly claim in India that they pay higher wages in factories than in outside trades. Labour, on its side, has been known to oppose minimum wage legislation along with other kinds of ‘welfare’ on the ground that the people ought to secure all they need for themselves by collective bargaining and that any outside interference will only delay this desired end.

It is quite possible that a definite wage-scale from which there is no appeal save through recognized legal process might do something to stabilize industrial conditions and to allay unrest, or at least to reduce its causes. It is also true that many factory workers earn comparatively high wages, but there are still certain processes or side trades where the wages are too low for decent maintenance, and it is quite possible to have a Wages Board for these alone. For instance, in Great Britain, the Lace Trade Board fixes certain rates for certain finishing processes, but cannot touch lace-making proper. The Chain Trade Board confines its attention to chains with links below a specified size, and when the Paper Box Trade Board was instituted it raised the wages of thousands in London, while strikes were threatened in some provincial factories lest wages should be lowered to the new legal scale. One great advantage arising from a definite wage list is that manufacturers can no longer undersell each other and an unfair form of local competition is therefore removed.

To Labour let it be said that British experience tends to confirm the view that Trade Board legislation, on the lines recommended by the Convention, stimulates rather than arrests organization. It is true that, in a trade that is largely unorganized, non-union labour must in all fairness be represented, but the mere collaboration of the workers tends to enforce the advantages of organization. Very probably, also, the same is true with regard to federated and non-federated employers.

Another fear of minimum wage legislation is that it will make it impossible for the sub-normal to obtain work. It is, however, usual to give a Board power to grant individual exemptions and thus avoid causing hardship either to employer or operative in cases where long service or a long business relationship between families ensures some work to an otherwise unemployable worker.

There is no doubt that most careful adaptation will be needed if India ratifies the Minimum Wage Convention. Probably the British Acts would come nearest to meeting her needs and fulfilling the rising aspirations of her Labour, but questions of application will need research and it would be fatal to allow legislation or orders to outstrip practicable administration. Two or three years are almost bound to elapse before the Government can take action, but it is to be hoped that the waiting period will not be unduly prolonged. Meanwhile very extensive preparation can be made. The history, results and methods of minimum wage machinery are frequently misrepresented and there are few people in India to-day who are really conversant with the subject. There is time for the economics departments in the colleges to make this a subject of careful investigation and instruction. There is time for labour leaders and social workers to undertake the necessary research. The innovation may seem almost negligible in its operations at first, but outside interference with wages is far too grave a responsibility to be lightly undertaken, and scientific enquiry and non-party presentation of facts will be necessary before a wise government will act, or even consent to make the necessary preliminary enquiries. It is often the province of the reformer to show good cause why an enquiry should be set on foot, and probably such evidence will be needed to stimulate the actual framing of legislation. The inevitable delay may irk those who are in close contact with the lives of the city poor, but it may and should be used to ensure the coming of reform.[1]

There is a good deal of agitation afoot to secure legislation making maternity benefit compulsory, and regularizing the position with regard to sick leave. The position of women in industry is not everywhere secure enough to make it safe to rush legislation on their behalf, and it is obvious that the question at issue is not the desirablity of maternity provision, but the method of application and the incidence of the expense. Should it be part of a larger scheme of health insurance and should it be partly contributory? Whatever form it takes eventually, it is to be hoped that it may depend, to some extent at least, on decent care of both mother and child. The practice with regard to sick leave varies considerably, and it may well be that standardization would be most easily secured through legislation. The question of long leave is quite as pressing, and the Bombay Agreement makes provision for this. A great many factories recognize the desire of the workmen to return to agriculture for two months or three in the year and keep their places open for them. It is felt as a distinct hardship and is a cause of unrest where this is not done.

Before leaving the subject of legislation, two further points must be raised. Firstly, it is little use to press factory legislation far unless there is parallel advance in other laws bearing on the lives of the people. England has rightly abjured the half-time system, but that is better than allowing children to run wild in the streets all day. It may be argued that the mother should stay at home and care for them, but boys in their early teens are very often beyond maternal control. Also, exclusion from factories would press them into unregulated occupations where the conditions are often far worse. It is unfair to gird at factory housing when the municipality allows worse conditions outside, to insist on maternity provision when there is no guarantee that the women will receive proper care or to demand leave that may simply be a means of introducing infection. The great need is for co-ordinate advance, in order that improvements in one aspect of life may not intensify the already existent dangers in others.

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[1] There is so much literature on minimum wage machinery that it has been judged unnecessary to enter into a more detailed description here.

Secondly, it is not often enough remembered that reform in India is hampered by the fact that the whole country is not under one rule. Two-fifths of India are ruled by upwards of one hundred Native Princes, each making his own laws, and although there is a certain control, it is not sufficient to prevent great diversity of law and great disparity of conditions. At present, many of the Native States have few or no factories within their borders, but many of them are ambitious to introduce large scale industry. Some of them are also ambitious to show that their industrial conditions are equal if not superior to those in British India.

At the moment the suggestion that an all-India concordat is urgently necessary may be smiled at as a far-fetched dream; but all reforms begin as dreams. In any case, a miniature International Labour Office is wanted in India, setting a common agreed standard and with some agreed right of oversight. At present advance is continually hampered by divergence of practice, and the danger is a growing one, for decentralization of industry is likely to be the tendency of the near future.

As a step in the direction of co-ordination, a beginning might be made by voluntary action. To-day, want of co-ordination is even more characteristic of the voluntary than of the legislative sphere. With the best intentions, men build out-of-date houses or make educational experiments that are doomed to failure simply because they have no idea of what is being done elsewhere. Some directors are making great efforts to give the best possible conditions, but a great many do as their neighbours do and have no idea how much comfort and contentment might be increased with little or no additional capital outlay. They have likewise no idea as to which improvements will appeal to or are even desired by their people. Again, how should they! They know little of Indian history, mental outlook or rural conditions, nor have they much opportunity to study them.

Various societies and institutions attempt to remedy this isolation of effort in other countries. Among many others, perhaps a version of the British Industrial Welfare Society would best meet the need in India.

This society or council is made up of employers and labour leaders of liberal views who are associated for the purpose of raising the standard of industrial conditions and for supplying information as to how this may best be done. The central staff are responsible for organization, propaganda and publications, and the archives of the society are a veritable mine of information on the technicalities of welfare. If a firm wants to adapt an awkward piece of land as a recreation ground, the society can show them just how such difficulties have been surmounted elsewhere; the starting of superannuation funds, the equipment of canteens, of dispensaries or rest-rooms, difficulties regarding insurance or compensation—these and endless other questions can be, and are, referred to the headquarters' staff. Would-be supervisors are advised as to training and others are recommended when suitable vacancies are notified. Such a society might be of immense help in India, if leading employers were willing to subscribe the necessary funds for upkeep, and it is at least worth consideration whether an affiliation with the British Society and some collaboration in publication might not be of mutual advantage. The International Labour Office now has a branch office in Delhi and this might possibly be utilized for a start, at least in so far as the collection and dissemination of information is concerned. Whatever method of co-ordination is finally elaborated in India, it is much to be hoped that occasional conferences may be part of the plan. Not only can enthusiasts then describe their pet schemes, but ideas and experience can be shared in verbal discussion far more effectively than through correspondence. Perhaps then the village plan at Cawnpore may re-appear in Bengal or Madras, and a model cottage seen in Bangalore may prove suggestive in Bombay or Ahmedabad.

This, however, brings us to the important question of welfare work, about which a book might be added to those already existing. In spite of what has been done already, the field for so-called welfare is almost limitless in India. Every factory has to work out its own salvation in India as elsewhere, but it is always easier for a welfare worker to begin on a definite item of work. We may therefore perhaps be pardoned for making a few suggestions as to how a more extended welfare campaign might help the Indian worker, without, let us hope, unduly burdening the employer.

The tendency to concentrate on extra-mural welfare has already been noted and can easily be understood, but this should not screen the fact that intra-mural work is needed, even if its potentialities are less apparent. Manufacturers can rightly claim that their factories stand well in comparison with most other countries, but they often complain that misunderstanding and suspicion wreck many of their schemes, and they often do not realize how much of their provision is wasted for want of skilled interpretation or an administrator to whom good conditions are a primary interest and not, in the very nature of things, a side issue.

It will be a long time before the present system of recruiting labour through sirdars or jobbers gives way to direct engagement, either through a special officer, as at Tatanagar and in one of the Ahmedabad firms, or through a member of the European staff, as in some of the South Indian mills. This is no reason why a beginning should not be made, and if a welfare officer interviewed new-comers on arrival something might be done to start them free of monetary entanglements, especially where wages are paid monthly. A satisfactory arrangement about advances to new-comers is an urgent need. It is quite possible that a moderate interest should be charged to make the arrangement economically sound by guarding against defaulters, but when a man has to wait six weeks at least for his first wages, he has no chance whatever of escaping the money-lender at the very outset of his city life. Where a mill has plenty of ground, temporary shelters giving free house room for one to two months might be a useful provision. At the expiry of the set probationary period, something would be known of the man and his habits and he could be drafted, as room permitted, into a definite section of chawl or lines, or left to fend for himself outside.

It is probable that the people would be satisfied with a very simple form of accommodation if it was understood that they were on probation, and it is also possible that valuable educative work might be done in the interval and ambition aroused if the more permanent housing contained certain well-defined grades, an experiment that has been tried with success in past years in Holland.

Housing is an ever-present and absorbing problem in India and it is already tempting us away too soon from the more subtle questions of intra-mural welfare. Inside the factories measures taken to secure general cleanliness, safety and hygiene are partly technical, as, for example, the removal of harmful cotton dust by vacuum cleaner, a method that has excellent results in some places. Even so, a great deal could be done to raise the standard and ensure the co-operation of the employees. Progress might be very slow at first, but much more effort can well be expended on this question if only as a contribution to an anti-tuberculosis campaign.

To the oversight of the amenities of the factory might well be added an oversight of the factory compound and especially of the sweepers appointed to look after sanitation. Many firms allow small refreshment shops to be set up on their premises, and sometimes their owners perambulate the factory at stated times with buckets of tea. In the vast Tatanagar works matters are so arranged that no workman is ever more than a few minutes' walk from drinking water or a sweetmeat shop. The Indian loves sweets and we know that sugar is a good antidote against alcohol. There is the more reason, therefore, to make such places more attractive and more hygienic than they are in the bazaar.

Then there is urgent need for better accommodation for dining and for rests. There are many old factories where space forbids any special accommodation, but the majority of factory compounds could do something to mitigate present discomforts. The Indian asks very little. His habits are exceedingly simple, but he appreciates quiet, shelter from sun, rain or dust, and a spot where he can smoke or sleep. A walk through a factory during the dinner-hour is a revelation of the variety of uncomfortable ways in which an Indian workman can find repose. It may be argued that the men already rest too much. That is often perfectly true, but here is also the possibility that if both rests and meals were taken under better conditions there might ultimately be a favourable reaction upon production, and even a shortening of the rests. We can see many heads being doubtfully shaken as this page is read and can almost hear the protests about want of space. These lines are not addressed to the minority of the mills that are hemmed in by city streets. They are written with a vivid mind picture of dusty debris-filled corners, where trees might be planted, of spaces that might be paved and provided with raised sitting places, as well as of larger areas where there is nothing to prevent the making of really good arrangements.

Reference has been made several times to the complaint that the dispensaries are not properly appreciated. The complainants have probably no idea of the enormous waste of medical advice and supplies in western hospitals that led to the adoption of almoners, or trained social workers who find out the circumstances of the patients, follow up the doctor's advice with explanation and interpretation, and if possible remove hindrances that stand in the way of obedience. Few people realize the agonies of nervous fear that may be aroused by the use of an unknown word or the terrible harm that may be done if medical directions are misunderstood or blindly followed. If such difficulties hinder medical work in the west, is it not likely that their danger is by many times greater in the east? The same is true of accident prevention and is too obvious to need further comment.

In these respects the women stand even more in need of help than the men. A manager wrote recently, when describing the achievements of a health visitor as an argument for the appointment of one in his own mill:

'Many of the complaints were of a more or less intimate nature, and, for this reason, the women gave a point blank refusal that they should proceed to the mill dispensary for treatment by the doctor babu. Further enquiries satisfied the mill authorities that there are numerous instances where these poor women, rather than subject themselves to examination by a member of the other sex, attempt to treat themselves (often with disastrous results), or what is perhaps worse, neglect the trouble altogether, and apparently such cases are far more numerous than anyone had ever imagined, in fact sufficiently numerous to justify the establishment of a female dispensary staffed by a lady doctor and (preferably) a female compounder at each mill or group of mills.'

Pending this desirable arrangement, tactful explanation and chaperonage might do a good deal to mitigate the unnecessary sufferings of the women. Again, if maternity benefits are to have their full effect, some woman must administer them. There is reason to fear that money benefits otherwise go largely to the men.[1] If they can be used as an incentive to good nursing, and regular clinic attendance, their value will be far beyond the purchasing power of the small sums of money involved.

The care of children during working hours is another problem that is only partially solved here and there by the provision of crèches with, very occasionally, schools attached. Probably a scheme of co-operation with local education and health authorities needs to be worked out before there is any very general extension, but here again sympathetic persuasion must be a part of such provision. Otherwise the crèches may be boycotted. To quote again from Lady Chatterjee: 'The only woman factory inspector in Bombay has effected much in this direction. She has been able to discover why certain crèches are unpopular. One was thought to have a ghost, another the evil-eye. No man inspector would have been able to elicit these facts, nor would he be in as good a position to make clear the needs of women workers to the employers'.

It has often been asserted that the appointment of a welfare supervisor tends to perpetuate paternalism to the detriment of independence and advance towards self-government. British experience hardly confirms this view. Many of the best welfare supervisors have been trained in self-government in public schools and universities, and they have been eager to stimulate like methods among the factory workers. In India the task will be both easier and more difficult; easier, because the people bring the traditions of self-government from their villages and with help should be able to adapt them to the calls of factory life; and more difficult because of eastern traditions of despotic rule. This statement may seem to be self-contradictory but India is full of contradictions and anomalies. They are part of her fascination, and they must be recognized and faced. One manager relied upon the tradition of family discipline. If a junior gave trouble he simply referred the matter to the older relative who had introduced him and the plan proved most efficacious. This brings out another trait which shows that works' committees should in time prove a useful part of factory organization. The Indian operative has as a rule a keen sense of justice. If he feels that he has been fairly heard by someone in authority, there is abundant testimony to his readiness to accept discipline and even punishment. The fatal doctrine of 'my side, right or wrong' does not seem to have infected him. His sympathies are naturally with his own side, but unless he is labouring under mass excitement, he listens to reason, provided that he feels assured in his own mind that he will be met with justice.

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[1] See Dr. Dagmar Curjel, *Women's Labour in Bengal Industries.*

The oversight of welfare funds from fines, etc., is another duty that may well devolve upon a welfare supervisor, but is better worked through a committee together with any recreational activities that may be gradually developed.

The most important side of welfare work in India is, however, not strictly intra-mural. No industrial question is more urgent than the housing problem. The custom has grown up in India for employers to house at least some of their workers. Visitors, fresh from the standards of other countries, may stand aghast at some of the housing provided. Their disapproval will be modified if they extend their researches outside the factory precincts, but, whatever the provision made, in the majority of cases the employer is not getting good value for his money. This does not refer to the company's balance sheet only. There will probably always be financial loss attached to mill housing, but better management might do much to turn into a spirit of co-operation the discontent on one side and the complaints of disorderliness on the other that are so frequent to-day. Nothing can make much of the housing ideal but it would be unreasonable to suggest a wholesale replacement. Meantime, an enlightened system of management might remedy many minor defects, especially if some study were made of experiments elsewhere. The manager complains of refuse thrown out of the windows, slops emptied into the passage, the theft of fixtures, etc., etc. The property-manager may well ask whether each dwelling has a drain pipe, whether the sweepers are carefully supervised, or whether the receptacles for refuse and the washing places are conveniently placed. One manager supplies all his dwellings with electric lights. How is it that they are not stolen? Can anything be done to make the people think it a privilege to secure a room in the chawls or lines? About sixty years ago Miss Octavia Hill initiated in England a system of house-property management by trained women rent-collectors, and it was by strict administration coupled with attention to numerous inexpensive but important details that one street after another was converted from a slum into the home of respectable folk. Her methods have since been followed all over the world, but they do not seem to be understood in India. They are not purely philanthropic in so far as she always aimed at making her houses pay a small rate of interest on invested capital. We do not suggest that the Indian mill-owner can do this, but it is mentioned to show that a system of specialized management need not be a pure loss to his firm.

If welfare were initiated by handing over the upkeep of the dwellings to a supervisor, other necessary reforms should follow. The workers could and should be followed into the mill and the amenities there managed on the same basis. Educational and recreational schemes can be developed as confidence is won and co-operation secured.

The argument applies equally to the chawls of Bombay or the lines of Bengal and the vision does not seem impossible of realization.

It is not fair to ask a woman to do pioneer work alone in India, and women would probably be the most successful workers in this sphere. As most of the activities described have passed the experimental stage in England, a beginning might be made by an agency, or even an Employers' Federation, engaging two trained women managers or social workers from England and giving them charge of a group of mills or of the mills in a district. They would have to bid them begin by working half-time while they learned to speak the language most prevalent in the district, and to warn them to be content with small beginnings until they had gained the confidence of the women. Chawl passages might be cleaned and whitewashed and so made lighter, even if a dark dado were added. A small hanging receptacle outside each door would make it possible to forbid throwing rice out of the window. A brightly painted room on the ground floor could perhaps be spared to serve as a clinic for women and children on one half-day a week, the services of a visiting woman doctor being secured if possible. The same room might serve for classes, talks and games for women and children, and as the forerunner of crèche or school if these are not already provided. Indians have a natural craving for colour and decoration. One wonders whether they could be induced and aided to find a substitute for the dirty sacks that flap from so many windows in Bombay, giving an air of sordidness to what should be one of the most beautiful cities in the world.

Details of development must always depend on locality and staff. Probably the best results would be secured if one of the original two were a qualified health visitor and the other a trained social worker.

Both must be prepared to undertake the training and oversight of Indian men and women to carry on different departments of work in the separate mills as they are initiated, and the consent of the management secured. It would, of course, be possible to enlist the help of outside agencies (Missions, Y.M.C.A., Y.W.C.A., Social Service Leagues, etc.) to organize such work, but there are often difficulties in the way of giving outside workers access to the interiors of the mills, and much would be gained by a co-ordination of conditions within and without. The same idea could be applied to the tea-gardens; only in this case probably at least one of the workers would need to be a man, and if a young man undertakes such a job, he must have sufficient prospects of advancement to enable him eventually to marry, bring up a family and retire. He could of course work alone, and the question of women's help might have to be solved by some kind of joint settlement serving again a group of gardens; but that is another story. What should be stressed at this point is that the elements of the scheme sketched here do not entail very great expense if applied in the first instance to a sufficiently large unit. Even if the initial cost seems high, it would be at any rate partly repaid in the long run and extensions and improvements would depend upon the consent of the management. If by any means they could secure the confidence and co-operation of their work-people in these days of unrest they would probably consider themselves repaid. Tea-garden experience shows that the Indian workman can be interested in the business of his employer; and India is not the only country where such interest is worth cultivating.

The usefulness of the welfare officer has been described above on what may be called a very elementary or material basis. In India, as in other countries, there are underlying troubles that are often difficult to detect and are always difficult to eradicate. The presence of an educated man or woman appointed to deal with amenities and conditions has often been found to be a powerful aid in both ways, so powerful as to give grounds for hoping that in India such appointments might in time have some effect on the widespread evils of bribery and corruption, terrorism, fear and disease.

There has already been plentiful discussion on the need and possible functions of industrial welfare workers in India and such discussion generally ends in one question, namely: How can such workers be obtained? It is not very long since the same question was asked in England and was not always answered with happy results. The right workers for India will not be easy to find. They must be trained and experienced, not too young to command respect and to face difficult situations, not too old to face the difficulties attendant upon the climate. There are excellent training courses for such work in Europe and America and experience in either country would be helpful, but neither training course nor experience would suffice to equip a man or a woman to undertake the great adventure in India without running the risk of making unnecessary initial mistakes.

The British university courses vary somewhat as to detail, but, in general, they last two years and require some study of economic history and theory, industrial law, and social and political philosophy or ethics. There is also some selection from such subjects as public hygiene, organization of government, statistics and business administration, insurance, etc.

There are visits to representative institutions, and practical work is arranged under a supervising tutor to suit the needs of each individual student. Very often a general training is given during the first year and specialization is encouraged during the second. If a higher diploma is granted one of the requirements is the presentation of an original thesis on some piece of social research.

Post-graduate students are usually exempted from repeating a subject if they offer satisfactory proof that it has formed part of their graduate course elsewhere. In such cases they may be able to take the diploma course in one year or to proceed directly to a higher diploma, or to devote extra attention to gaining practical experience.

A certain amount of adaptation would be necessary to give the maximum advantage of the training to students desirous of working in India, though they ought to be able to gain a diploma that would also serve as a passport to similar work in England, should they for any reason find it impossible to settle in India. On the whole, probably Birmingham University offers the best facilities at the moment, especially as the authorities there have already some experience in training Indian and other non-British students for social work in their own countries. There is already a good deal of elasticity about the syllabus, and it might be possible to add an extra option to consist of a series of lectures on Indian history, religions, and social and industrial organization. The proximity of the missionary colleges makes it specially easy to secure this and to ensure that a university standard is maintained. The ordinary forms of social work can be studied there, and, in addition, arrangements can be made for training in property management on the Octavia Hill lines. The same is true of London, but this department is not quite so elastic as in the newer centre in the Midlands. For India it is essential to learn something of the textile trades, and for this the student would have to migrate to Manchester and Dundee, where practical experience can generally be gained in the welfare department of a mill. Most authorities agree that the language can best be studied in India, and missionaries set the first year aside for this purpose. Business firms might not be willing to grant so long a probation, but little can be done without some knowledge of the language, and they should be willing to make suitable arrangements.

This account of possible training reads rather as if it were proposed to hand over welfare work in India entirely to the management of Europeans. This is by no means the intention, although men and women from countries with a longer experience along these lines would probably do the best pioneering work. Eventually, however, the bulk of the work will undoubtedly pass into Indian hands and this aim must be steadily borne in mind. At present, however, India has no experience in training such workers. A few students can and do study in England, but such an expensive education must always be the privilege of the few. A university course of social study on the lines of some of the western university departments is badly needed in India, and there is reason to hope that some of the professors of economics are beginning to realize this. A beginning can be made without great expense to the university concerned. Lectures in history, philosophy, commerce and economics can be attended in common with ordinary students, and medical schools may be able to supply the necessary elementary courses in public and personal hygiene. It is essential to have a tutor to supervise the practical work, and at present such a tutor must almost inevitably be a European, again because, at the moment, Europeans have the requisite experience. It cannot be too strongly emphasized that training as a nurse or even as a doctor is not in itself a sufficient preparation for industrial welfare work, still more for the practical tutoring of students. This does not mean that the tutor is the sole teacher. In England, students are passed from one society to another, building up an all-round knowledge of social activities, while the tutor co-ordinates, balances and fills in the gaps. As welfare departments increase in India, it is to be hoped that students from universities would be allowed to fill temporary posts as assistants in order to acquire the necessary practical and technical knowledge. The American student often adds a period of manual work in a factory during a long vacation.

Finally, there may come a day when a university in England and a university in India agree to enter into a scheme of collaboration. In that case, a British student might learn the ground-work of the craft, say, in Birmingham and Manchester and proceed, say, to Allahabad or Lahore at the end of one or two years' course of study. There, one additional year could be spent in studying the Indian aspects of the subject and the Indian language. Similarly, the student from Allahabad would find a welcome in Birmingham and facilities for enlarging his Indian knowledge in the light of world experience. Such an exchange could be effected to-day, but it will be more effective when there is definite collaboration and agreement as to interchange of courses.

There is one more probable development of industrial welfare work in India that must not be omitted. In discussing the subject, several managers have asked whether the missions could not undertake the work for them. There is a danger lest this course may encourage the divorce between intra- and extra-mural welfare that already exists in some places. Still, it seems as if the missions and allied societies might give valuable help in the starting of new schemes if they are prepared to recruit the right type of workers. It is wasteful to employ on social work those who have been trained for evangelism, teaching or nursing, nor does social work prosper therefrom. Settlements and analogous enterprises released a flood of social energy in England, calling in folk who were imbued with Christian spirit, but who felt no call to directly religious work. The foreign mission field has never yet offered scope to such workers. There must be some who feel the foreign call, just as there have been many who felt the home call, and who long to show the fruits of Christianity as their contribution to the mission field and so will be content to do the secular tasks for which they have the gifts. If business managers prefer to begin by trusting missions and societies and are prepared to contribute sufficiently to the funds, it will be a thousand pities if the missions and societies do not rise to the occasion, both by providing European social workers and by finding Indian men and women suitable to train, both under them and at whatever university first institutes a suitable course.

Let us hope, however, that the universities will not rest content with giving civic and economic training to future Y.M.C.A. secretaries, secular mission workers and social workers of every grade. There is already a tendency in India to throw all the onus of social enterprise on to professional workers, while for others the committee habit is spreading with fatal ease and yet this is the least part of social service.

Organization is necessary, but it has never yet saved a people. If Christianity teaches anything, it teaches that patient individual intercourse is at the root of all reform. The west has been slow in responding to the civic call; the east is only just beginning to hear it. The east has not yet realized that private effort and experiment are far surer guides to legislation than untested theories.

The people must be educated to use the privileges that are claimed for them and to claim those that are wrongfully denied them. This training can be accomplished through friendship of the educated for those who have fewer advantages. Poverty need not altogether stand in the way, nor need the stern demands of professional life. Some of the greatest pioneer philanthropists have worked hard for their livelihood.

Many Indian students are beginning to realize this—some bring back exact observations from their village homes; others start schools for youths during the long vacation. At a recent conference with a party of University economic students the writer was much struck by the variety of questions brought forward, giving proof of an eager and intelligent interest of exceptionally wide scope. Perhaps India is ripe for a settlement movement, that shall unite men or women of different creeds and races in the common enterprise of sharing their education through neighbourliness. A new Toynbee Hall in the mill district of Bombay would allow the residents to give of their leisure to adult education while carrying on their own professional work; a Hull House on the banks of the Hooghly might supply the mill managers with the workers who are needed in their lines. Such settlements have also always served as centres for non-resident workers who want to give part-time service where their energies can find experienced direction.

India needs a great uprising of forces determined to attack the dense ignorance, poverty and superstition that shroud and impoverish her life. It is true that educated Indians are not bearing their share of the burden, either by service or financial aid. It is also true that Europeans are not doing their full share. There are many British women in particular whose children are at school, whose households are well-ordered and easy to direct and whose lives are woefully empty of vital interest. Many of them might make a great contribution to the welfare movement if they would learn to relieve their husbands of some of the details of line or chawl management.

The word 'learn' is used advisedly. Civic education should precede or at least accompany civic work. One wonders whether some kind of University Extension movement might be a success in India. We are concerned here with civic training, but this is of course only one branch of university extra-mural work. Is it quite impossible for clubs to have one course of serious lectures during the cold weather—an interruption once a week or once a fortnight to the ceaseless round of games that many members find monotonous? Britons have the larger experience as well as a religion that calls for civic effort. Many of them, including the women, already throw themselves heart and soul into educational and other social enterprises, but the duty is laid upon *all* in this country where they claim to lead.

'There are many signs that educated Indians are beginning to recognize their responsibilities and opportunities in the matter . . . But they will be without first-hand experience and must make many mistakes . . . Is it too much to hope that in this vital matter the west will come to the aid of the east? . . . We feel that there will be a response to this call, and it is the conviction of the present writer that the response will be the readiest from the followers of the religion which, rising in the east, has humanized the west. It will be noble work worthy of the disciples of the Master.'[1]

These dreams of to-morrow must draw to a close. They leave untouched the great questions of industrial unrest, unemployment, the strife between Capital and Labour, the unsatisfactory relations between landlord and tenant. No country has solved these problems. At the best, some have groped further than others. Probably no one country will ever solve them. They are world problems with national forms. This report can only hope to make a few suggestions that may help India to clear her path for making her own contribution to the solution of the world problems.

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[1] Sir Atul Chatterjee in the *International Review of Missions*, January 1928.

Two of the chief advocates of this modest survey asked for a report that should fulfil three purposes, namely:

To influence Christians in India to discuss the industrial situation, to suggest legislation and to act upon their convictions.

To stimulate similar studies in other countries.

To enable enquirers to see what is open to them to do.

It is not addressed to Christians only, but to all lovers of a great country that is poorer than it need be, more prone to disease and disaster. If it in any measure fulfils the modest purposes quoted above it will not have been written in vain, in spite of its partial scope and its many omissions.

APPENDICES

APPENDIX I

REPORT OF A CONFERENCE ON INDUSTRIAL PROBLEMS

Held in Poona, 14th to 15th January, 1929

Present

Mr. S. K. Rudra (Reader in Economics, Allahabad University).
Rev. F. M. Perril (M.E. Mission, Cawnpore).
Mr. W. E. D. Ward (Welfare Work, Y.M.C.A., Bombay).
Dr. Manshardt (Director, Nagpada Neighbourhood House, Bombay).
Mr. S. C. L. Nasir (Y.M.C.A. Welfare Work, Nagpur).
Mr. P. L. Krishnaswamy (Convener, Industrial Committee of Madras Representative Christian Council).
Mr. S. V. Kirloskar (Kirloskar Bros., Kirloskarvadi).
Mr. P. G. Kanekar (Social Service League, Bombay).
Mr. T. W. Johnstone (Chief Inspector of Factories, Bombay).
Mr. Varadarajulu Naidu (Secretary, Labour Union, Madras).
Mr. J. R. Eason (Scottish Mission Industries, Poona).
Miss M. Cecile Matheson, Miss I. Wingate, Mr. Manohar Lall (Members of the Industrial Commission of the National Christian Council).
Dr. John R. Mott (Chairman, International Missionary Council).
Rev. W. Paton (Secretary, International Missionary Council).
Dr. Macnicol, Miss Van Doren, Mr. P. O. Philip (Secretaries of the National Christian Council).

The Rev. W. Paton occupied the chair and opened the conference with prayer.

Apologies for absence were read from Miss Tilak (Social Work Training Centre, Bombay); Dr. P. P. Pillai (Director of the International Labour Office, Delhi); Mr. Sankara Bankerlal (Labour Union, Ahmedabad).

The Chairman made a statement explaining the purpose of the conference, in the course of which he made mention of the investigation made during the past months by Miss Matheson and her colleagues, under the auspices of the National Christian Council; and said that their report would be of immense use to missions and churches in giving accurate information about the conditions of industrial workers, and also guidance as to the lines of work they could undertake for their betterment.

LEGISLATIVE ACTION

I. *Amendment to the Factory Act*

Miss Matheson placed before the conference certain proposals about getting the present Factory Act amended.

(1) One of her proposals was for reduction of hours of work to a 54-hour week and 10-hour day.

After discussion and careful consideration, it was agreed that efforts be made to secure a normal 55-hour week and 10-hour day, seasonal industries being considered an exception.

(2) The second proposal was that efforts be made to secure that no spell of work without a pause be longer than five hours. This was agreed to.

(3) The third proposal that was agreed to was that efforts be made to get the multiple shifts abolished.

(4) The fourth proposal was that work-places employing ten or more persons be brought under the Factory Act. After discussion it was agreed that efforts be made to secure that work-places using power and employing ten or more persons on any day in the year be brought under the Factory Act, bearing in mind that the Washington Conventions have to apply to such places.

II. *Legislation about Fines*

It was pointed out that at present there was very little control over fines and deductions in industrial undertakings, and that efforts should be made to secure some legislation to remedy this. After discussion, it was agreed that the Government should be pressed to accept the principle that fines and deductions should be fair and reasonable, and not be a source of profit to the employer; that they should be recorded in a register, and that the Factory Inspector should have the right to inspect this register.

III. *Increase of the Inspectorate*

If the proposals made above are to be carried out, it would be necessary to increase the number of Factory Inspectors. The matter was discussed carefully, and it was agreed that the Government be urged to increase the inspectorate, and that there be a woman inspector at least in each of the large industrial centres.

There was also agreement about using more fully than is done now the clause in the present Act by which 'public officers' are empowered to inspect factories.

IV. *Alteration of Patterns*

Miss Matheson brought to the attention of the conference the practice by which wages agreed upon for working a particular pattern are kept unaffected while the pattern itself is altered. It was agreed that this matter be investigated.

V. *Minimum Wage Legislation*

A memorandum on the subject by Miss Matheson was circulated among the members, and she also spoke from her experience of the working of the minimum wage machinery in Great Britain.

After discussion, it was agreed that the Government of India should be pressed to ratify the Minimum Wage Convention, and that legislation along the lines suggested by the convention be asked for, without stressing the need of applying it to home trades.

It was pointed out that when legislation had been passed, it would be open to any body of persons to move that any given industry or parts of an industry be included.

It was also agreed that an article on the subject of minimum wage legislation, explaining its purpose, its working in countries where it has been adopted and suggesting in what respects, under what conditions and in what trades it can be applied in India, be secured and published in the *National Christian Council Review* and be made available to the public.

VI. *Amendments to the Workmen's Compensation Act*

Mr. Varadarajulu Naidu made some proposals showing in what respects the Workmen's Compensation Act needed amendment.

After discussion, it was agreed that the points be referred to the Industrial Committee of the National Christian Council, and that opportunity be taken to make representations on this matter when the Act will be coming up for revision in two or three years' time.

VII. *Legislation on Maternity Benefit*

The need for legislation on maternity benefit was considered. It was agreed that efforts should be made to secure such legislation on this matter as would satisfy as far as possible the Washington Convention.

VIII. *Sick Leave*

Mr. Varadarajulu Naidu pointed out the need for legislation by which workmen could get at least twenty days' sick leave in a year, on doctor's certificate, on full or half pay.

It was felt by some that experiments along this line should be tried and experience gathered. After discussion, it was agreed that efforts be made to secure such legislation.

TARIFFS

Miss Matheson gave some instances of tariffs which impede the educational and hygienic progress of people. Educational films imported into India have a prohibitive tariff. This makes the use of educational films in welfare work among workmen very expensive.

So also a tariff on scientific instruments, especially microscopes, is retarding medical treatment.

It was further mentioned that the special kind of cloth needed for working embroidery and lace was subject to high tariff. If such cloth coming from foreign countries could be imported on less tariff or a rebate allowed on re-import, it would greatly help the lace and embroidery industry.

After consideration, it was agreed that the Christian Medical Association be requested to take up the question of tariffs on scientific instruments with a view to getting them reduced.

It was further agreed that more evidence on the other matters mentioned must be gathered before any action could be taken.

AN INDUSTRIAL WELFARE SOCIETY FOR INDIA

Miss Matheson, in introducing the subject, spoke about the absence in India of any kind of co-ordination in welfare work. For instance, in some places housing plans are worked out; but those in other centres know nothing about them. We, in India, need an Industrial Welfare Society (on the lines of the one there is in England) to collect information and advise as to welfare matters. The Industrial Welfare Society of England was started by a clergyman, Mr. Hyde, soon after the War. He got several employers interested in it. The Society has a staff of experts, and any firm which wants information or help can get it. The firms pay a certain contribution for the upkeep of the Society. The standard of welfare work in England has been considerably raised by this Society. It may be possible to have a branch of this Society in India, but organized as an autonomous body.

In the course of the discussion, the following points were brought out:

(1) That Mr. Hyde, if invited, might be willing to come to India and help in organizing a Welfare Society for India.

(2) That work-people should be made to feel more and more that they have a share in welfare work.

(3) Care should be taken that welfare work is not used as a rival to trade union, and in this connexion it was pointed out that the name 'Welfare Society' might be a handicap.

After consideration, it was generally agreed that it would be an advantage to have a Welfare Society on the lines outlined above, with a clearly defined objective for India, and that the question of its affiliation to any outside organization should only be considered later.

It was further agreed that Miss Matheson and Mr. Nasir be requested to enlist the support of bodies like the Millowners' Association and trade union organizations for bringing Mr. Hyde out to India for a short period to render help in organizing such a society and in discovering suitable men and training them for carrying on the work.

WELFARE OR LABOUR SUPERVISORS

Miss Matheson proposed that every effort be made to promote the appointment of welfare or labour supervisors, to undertake, among other things:

(1) Direct management of labour.

(2) Property management of lines or chawls.

(3) Health, educational and recreational work, always safeguarding the direct access of labour to management as it exists in many places at present.

It was also pointed out that such welfare supervisors might handle advances to workmen now given through jobbers, and that they could also develop adult education activities and the committee or *panchayat* system.

After discussion, it was agreed:

(1) That every effort be made to promote the appointment of welfare or labour supervisors as outlined above, and that where firms are found willing to co-operate in the appointment of such supervisors, the facts be recorded and definite schemes for promoting such appointments be submitted to the firms concerned.

(2) That the International Missionary Council and the National Christian Council may be requested to recruit suitable persons for such work.

(3) That when the proposed Industrial Welfare Society is started in India one of its functions should be the promotion of the appointment of labour and welfare supervisors in Indian industrial centres and rendering them help and guidance in their work.

A TRAINING SCHEME FOR WELFARE WORK SUPERVISORS

Miss Matheson placed before the conference the outline of a scheme for training welfare work supervisors, Indian and European, both to meet immediate needs and possible future development of educational facilities in India. This scheme contemplates co-operation between the Economics Department of some of the Indian Universities with the Universities of Birmingham and Manchester. This was recorded.

THE PLACE OF CHRISTIAN AGENCIES IN VOLUNTARY WORK FOR AN INDUSTRIAL POPULATION

After a full discussion of this subject the following resolutions were unanimously adopted:

Resolved that the Executive of the National Christian Council be requested to appoint a committee of the National Christian Council, which shall work in co-operation with similar committees of the Provincial Christian Councils, to have charge of industrial problems in their relation to the Christian Church and Christian Missions. The duty of that committee shall be to bring to the attention of the Church and of Christian Missions the urgency of the call to the Christian forces in India to undertake new types of service in relation to the needs of the rapidly growing industrial population in this country, especially as these needs are presented in the report that has been prepared by the Industrial Survey Group of the National Christian Council.[1]

That some of the ways in which that committee would discharge its task are the following:

(1) That by means of public meetings and conferences of Indian Christians at various centres, especially in the industrialized areas, this Committee, with the co-operation of the Provincial Councils and of local Christian leaders in the various areas, shall press upon the Church the call that the needs of the industrial population bring to every Christian to seek to help these people in the temptations and hardships of their lives, by friendship, by an understanding of their needs and difficulties, by

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[1] This committee has since been appointed.

voluntary service along educational, recreational and health lines, through the establishment of adult and other schools, by means of lantern and general lectures, by establishing libraries and reading rooms, as also hostels for young people among such workers; also by giving them training in committee work, by the inauguration of infant welfare and health education, by the establishment of crèches, of troops of Scouts and Girl Guides and similar organizations, by helping to form clubs, by organizing games, and musical and other entertainments, by carrying on temperance work, and, in these and other ways, by engaging in voluntary Christian service on behalf of these classes of the community.

(2) That the claims of this industrial population and the call to the Church to help them be brought, by this committee, to the attention of students in theological and other colleges, and in student camps, and that they be urged to consider how they can give their lives to service of these classes, and co-operate with others in such voluntary service whatever their own future careers may be; that at the same time this be brought to the attention of the non-Christian students and that they be invited to co-operate in such service and their responsibility be similarly pressed upon them.

(3) That the authorities in such theological and arts colleges be urged to give an important place in their curriculum of studies to subjects relating to this type of service, and that some arts colleges be urged to consider whether they can institute courses of training for workers in this department of service.

(4) That arrangements be made for the production of literature in English and the vernaculars, drawing attention to this type of service—especially of study books for young people's classes.

(5) That the Churches be urged to recognize it as their duty to follow their members to the industrial areas and, either by their own efforts or through some other Church or Mission, to endeavour to discharge the responsibility for their instruction in Christian truth and their upbuilding in general character in these new and difficult circumstances.

(6) That the committee take measures to bring to the attention of Missionary Societies the need that some at least of them, especially those which have work in areas where large industrial populations are gathered, should appoint members of their Mission staff who shall be specially qualified to take charge of work of this kind and to give guidance to the Indian Church, and that in seeking to arouse interest in this matter in the older Churches of the west they invite the co-operation of the International Missionary Council.

(7) That such societies be urged to consider the establishment of centres for the industrial population, similar to the Neighbourhood House of the American Board of Commissioners for Foreign Missions at Byculla in Bombay, where practical instruction shall be given in this type of work to Indian Christians and other young people.

(8) That plans be made for the establishment at different industrial centres of training schools for workers similar to the Social Service Training Centre in Bombay, where men and women, Christian and non-Christian, both those who are themselves actually artizans and others, shall be trained for service of the industrial population.

It was further resolved to recommend to Churches and Missions that in undertaking and discharging this service of the industrial population, they should seek in every way possible, consistently with their Christian motive and aim, to co-operate with non-Christians who are actuated by a similar desire to serve and help the industrial community.

APPENDIX II

REPORT ON ECONOMIC STATUS OF WOMEN WORKING IN SHOLAPUR MILLS

By Iris Wingate

Sholapur is a city of 119,500 inhabitants according to the last census. It is an old centre of the handloom industry and this is still the major occupation of the town outside the cotton mills. According to the recently issued *Report on Family Budgets* of the Bombay Labour Office, out of 62,000 persons engaged in industry, 50,000 are employed in the textile industry.

There are five cotton mills employing 16,975 persons, of whom 4,335 are women. The number of cases investigated in the present inquiry was 482, or just over 10 per cent, belonging to all the various castes employed.

This inquiry was conducted during August 1928, with the object of discovering the salient facts concerning the economic status of women workers in the textile industry. Sholapur was chosen primarily because a suggestion had been made that a somewhat similar inquiry be held on behalf of the Bombay Representative Christian Council. It was in the hope that the National Christian Council inquiry might serve both purposes that this place was selected.

METHOD OF INQUIRY

A *questionnaire* was drawn up covering the points required and the answers were obtained personally from the women in their own homes and in one case at a mill crèche, partly by myself and partly by a schoolmaster whose full-time services were obtained. The managers of the mills were asked to supply the following information:

(1) The number of women employed by them, and their caste.

(2) Minimum, average and maximum wages for a given month, July 1928.

Two mills supplied this information in full, one supplied all but the wages particulars and for these referred us to the *Labour Gazette* for May 1925, which gives figures for August 1923, stating the wages had not changed since then.

No serious attempt was made to collect family budgets as there had been a Government inquiry into this in 1925, the report of which has just been published in time for reference to be made to it in this report. About a dozen typical budgets were collected for comparison and the results obtained will be found below.

Every effort was made to ensure accuracy and to verify statements. On the whole I am satisfied that the information obtained was correct, but it is probable that implicit faith cannot be placed in every return made. Where there seems to be doubt as to accuracy reference will be made to this fact. Completely true answers to questions are not always easy to obtain from ignorant people. Yet it is only fair to record that when the purpose was explained, the information asked for was freely supplied both by workers and most mill owners.

Classification. The 482 cases studied were divided as to caste as follows:

Hindus ...	178 = 37 per cent		330 = 69 per cent
Outcastes ...	152 = 32 ,, ,,		
Mohammadans ...	54 = 11 ,, ,,		
Criminal Tribes ...	52 = 11 ,, ,,		
Christians ...	24 = 5 ,, ,,		
Caste unknown ...	22 = 4 ,, ,,		

While these figures do not correspond, exactly as to proportion, with the total numbers of these castes employed in the mills, they are a fair indication of their proportions, as may be seen from the following two typical mills which made returns as follows:

	MILL I	MILL II
Hindus	1,846 = 82 per cent	566 = 80 per cent
Mohammadans	252 = 11 ,, ,,	51 = 7 ,, ,,
Criminal Tribes	131 = 7 ,, ,,	92 = 13 ,, ,,

The total number of Christians working in the mills is included in this report. One curious discrepancy discovered was that the mills, in the returns supplied by them, stated the number of Christian women employed by them as nil, while 24 Christian women were found who were working in these mills and were included in this inquiry.

Of the 482 women covered by the inquiry there were:

Married women with husbands ...	396
Widows	81
Deserted wives	3
Unmarried	2

The husbands of 333 women also worked in the mill, 63 did other work while their wives worked in the mill. The total numbers in the families concerned were:

Adults	1,235
Workers	1,065
Children under 12	864

The average family contained five persons, three adults and two children under 12 years of age.

The number of children in each family was as follows:

No. of children in family	1	2	3	4	5	6	7	Nil
No. of families ...	106	153	111	47	8	6	1	50

Housework. Besides working ten hours a day in the mill 446 women did all their own house work. That is 92 per cent.

Care of Children. Crèches are provided by all the mills. These vary considerably in adequacy and in the provision made for the children, but one or two are in good situations and well cared for. All are taken advantage of by a large number of women. Of the families investigated:

50 had no children.
14 had children over 14 years of age.
4 sent the older ones to school and had babies in the crèche.
6 left the youngest in the crèche and the older ones at home with a relative.
15 had all their children in school.
36 left the babies in the crèche and the older ones at home uncared for.
50 have only young children who are all in the crèche.
46 left all the children at home in care of a relative.
256 left all their children at home uncared for.

Regarding five no returns were made. In all cases where relatives are referred to, they include any adult over 14 years not going to work. Where, as often, it simply means that the oldest child is over 14 years, the attention given to young children cannot be considered adequate, but in view of the fact that girls marry at that age or soon after, 14 was taken as the minimum age for an adult in this connexion. All those who sent any of their children to school were either members of the Criminal Tribes for whom it is compulsory, or Christians.

Of the total of 482, 388 only worked from necessity and would remain at home if not driven to the mills by economic pressure. Ninety-four worked from choice as well as necessity and did not wish to remain at home idle. These included mothers of large families as well as those who had no home ties. Possibly on account of their extreme poverty a life of leisure could not even be conceived of in their imagination.

Housing. The Sholapur Mill workers live in several different types of housing, varying considerably in quality. The Criminal Tribes are in a special settlement under the care of the American Marathi Mission. Practically all build their own houses in the style they prefer, each tribe having its own clearly marked type of house, and pay a nominal rent for the land. These huts may be of mud and thatch, or merely shelters of grass and leaves, sometimes not more than three or four feet high and primitive in the extreme. Other workers live in mud huts also built by themselves. Some of these on waste land are rent free, others pay a small ground rent. Very few live in *pucca* houses except those who live in the mill lines. All the mills house a proportion of their people. The majority of the mill-housing is a considerable improvement on the private types. One mill has a large settlement comprising houses of different kinds and here the standard has steadily advanced with each new type constructed. For these mill chawls it seems the practice to charge a rent somewhat lower than the economic rent.

Of the families studied the rents paid worked out as follows:

Rent per month	As. 12 or less	Re. 1 to Re. 1-8	Rs. 2 to Rs. 3	Rs. 4 and over	Rs. 5 and over	Nil
No. of families	149	203	80	9	3	35

The rents paid by three familes was not recorded.

The total average rent works out at Re. 1-3 a month. It will be seen from the fact that 35 families pay no rent, and as many as 149 pay less than 12 annas, usually 8 annas, that village conditions still obtain to a certain extent. The reason for this is that the mill workers do not live in the city itself but on the outskirts, or even in the surrounding villages, some coming as much as two and three miles to work each day.

Wages. The standard of wages in Sholapur is considerably lower than in either Bombay or Ahmedabad. To compare these rates and the comparative cost of living, general reference may be made to the *Reports* of the Bombay Labour Office.

All the mills in Sholapur give a grain allowance, which seems greatly appreciated. The district suffers from frequent scarcity and general shortage of rainfall so that the prices of the staple foods vary considerably from year to year. All workers who have not missed more than four days' work out of the full working month are entitled to this allowance, which is eighteen seers[1] of *jowar* and two seers of *dhal* to each adult worker and half rations to each half-timer. A fixed amount, Rs. 2, is deducted from the workers' wages irrespective of the market price which was about Rs. 3 at the time of the inquiry, but would be much more in a bad year. Inquiry revealed that this grain allowance was highly valued and indeed was sometimes the main inducement to take up factory work. The women when questioned seemed to receive this allowance regularly and indeed implied that they could not live without it on account of the smallness of their wages. This statement conflicted somewhat with the statements of two mill managers that the labour was very irregular in its attendance. According to mill registers of two mills the number of women attending the full number of working days in the month was only 56 per cent and 53 per cent respectively. The truth seems to be that while over 50 per cent fail to put in a full month's attendance, very few are absent more than four days in the month, in order to get their grain allowance.

A few *mukadams*, or forewomen, earn from Rs. 12 to Rs. 15 or Rs. 20 per month. The average wage including all classes, as shown by the women's own statements was Rs. 8–6 per month; according to returns furnished by the management of two mills it was Rs. 8–8, including grain allowance in both cases, so the agreement is very close, and the women's statements are evidently to be relied upon. The average minimum wage for all departments employing women in the above mills was Rs. 4–14 per month and Rs. 6 per month respectively.

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[1] One seer = 2 lb.

According to the statements made by the women of their average earnings they were as follows:

Wages	Rs. 7 and under	Rs. 8 to Rs. 9	Rs. 10 to Rs. 11	Rs. 12 to Rs. 15	Over Rs. 15
No. earning	194	164	86	31	6

One woman had newly joined work and had not received any salary. It was worthy of notice that she did not seem to have any idea of how much she was entitled to for a full month.

From the above figures it will be seen that 92 per cent earn less than Rs. 12 a month, 74 per cent earn less than Rs. 10, and 40 per cent less than Rs. 8 a month. That is Rs. 6 in cash wages plus the grain allowance. This result may be compared with the figures given in the *Families' Budgets Report* of the Bombay Labour Office, page 15, namely:

Out of 290 women:

137 women earned less than ... Rs. 9 per month.
139 ,, ,, between Rs. 9 and 12 ,,
9 ,, ,, ,, 12 ,, 15 ,,
5 ,, ,, ,, 15 ,, 18 ,,

making 95 per cent earning less than Rs. 12 a month, which agrees with the results obtained by the present inquiry. According to the 'Report on Wages and Hours in the Cotton Mill Industry in the Bombay Presidency, August 1923,' published in the *Bombay Labour Gazette* of May 1925, to which we were referred for particulars by one mill, the average of wages actually earned was Rs. 8–9 per month as against a possible Rs. 10–11 for the full working month. These figures, it is stated, do not include the grain allowance; therefore another Rs. 2 per month must be added to each of the above figures, making Rs. 10–9 and Rs. 12–11, respectively. Rs. 10–9 as the figure for actual average earnings is considerably higher than that given in August 1928, either by the women themselves or the mills furnishing returns, mentioned above. Whatever the cause it is evident that the average wages to-day are considerably less than those given for August 1923.

Comparing the scale of wages here given with those of Bombay or Ahmedabad it will be seen that they are very low indeed in Sholapur.

Economic Independence. Where the women were married, they without exception handed over their wages to their husbands. If widows, the pay was handed to the male head of the house if such existed. Of the 86 women who were not living with their husbands 80 retained their wages in their own hands and six handed them over to a male relative. Out of the 80 who kept their own wages the following table shows the number of persons supported by each. These were in every case the woman's own children.

No. of cases	1	2	3	4	5
No. of persons supported	12	28	30	8	2

On an average each woman supports 2·4 persons. While in the case of wives their wages may be held to be supplementary to their husband's earnings, the figures quoted above refer also to all those women upon whom falls the whole burden of supporting the home. They cannot possibly be made adequate to supporting an adult and two or three children. That this is a cause of direct and very severe temptation to women who are without husbands was brought to my notice several times by being brought in contact with its results.

Family Earnings. Besides ascertaining the women's wages an attempt was made to discover the total income of the families. Too much reliance cannot be placed on these figures as there was no means of verifying statements as to the total family earnings, and it is evident that in some of the larger families every source of income was not given. Yet when all allowance has been made, the fact that 87 per cent of the families are shown as earning less than Rs. 30 per month, and that 58 per cent of these have from four to eight persons in the family, the low standard obtaining is clear.

The average for all families, irrespective of size, was Rs. 22–6, excluding grain allowance. In cases where there were workers in the family, other than the woman concerned and her husband, particulars of where they worked were not obtained. Thus the amount of grain allowance in these cases could not be calculated, so it has been omitted in all cases. Where the grain allowance is given it is sufficient for the needs of one person throughout the month as far as this grain allowance is concerned. There may even be a small surplus if several in a family are receiving it.

The family incomes were as follows:

	NUMBER IN FAMILY									
	1	2	3	4	5	6	7	8	9	10
Income below Rs. 10	5	6	7	4	...	...	...	...	...	...
,, ,, 20	2	17	39	58	24	7	...	...	...	...
,, ,, 30	...	10	41	69	64	31	12	1	...	...
,, ,, 40	...	...	7	6	14	15	10	5	...	...
,, ,, 50	...	...	...	...	2	3	...	1	1	...
,, ,, 60	...	...	...	1	1	1	...	...	...	...
,, ,, 70	...	...	...	...	...	...	...	...	...	3

One joint family of 13 members were earning a combined income of Rs. 90. Fourteen cases were rejected as doubtful. These represent cash wages in every case.

Debt. Thirty-one of the women questioned did not admit to being in debt, but the unanimous opinion of those who knew the local situation seemed to be that debt was universal. Besides those incurred for marriage, religious ceremonials, etc., including old debts incurred before joining the mill, purchase on the instalment plan seems very common and most clothing seems to be bought in this way.

Family Budgets. As previously stated, no attempt was made to go thoroughly into this subject as it was too complicated a one to be handled in the time at my disposal. Also the Government report is available. Twenty typical budgets were collected by way of comparison. Four of these were rejected as incorrect; sixteen were tabulated. According to incomes they are as follows:

Incomes	Number of Budgets	Average No. in Family	
		Adults	Children
Below Rs. 10	2	1·5	2
,, 20	10	1 9	1·6
,, 30	3	3·3	2
,, 40	1	3	3

PERCENTAGE EXPENDITURE BY INCOME GROUPS

	Incomes			
	Below Rs. 10	Below Rs. 20	Below Rs. 30	Below Rs. 40
No. of Budgets	2	10	3	1
Food	50	47	43	55
Fuel and Light	14	16	13	10
Clothing	17	15	15	10
Rent	17	6	11	11
Drink, Tobacco, etc. ...	...	4	11	10
Miscellaneous	2	12	7	4
Total ...	100	100	100	100

Christians. Some effort was made to ascertain the position of the Christian women in the mills. Their number is small and they are distributed through three mills; nevertheless no complaint was made of unfair treatment or discrimination against them either on the part of the mill management or on the part of their fellow-workers. One or two hold the position of *mukadam*, or forewoman, in charge of a varying number of women and these earn good salaries according to Sholapur standards. On the other hand, some of those working in the mills are widows and on the low wages obtaining they cannot keep themselves and their children and a roof over their head. They also feel the need, as do all Indian widows, of protection. For these reasons there are some sad cases where character and self-respect have been lost in an attempt to get protection, house-room and food.

Conclusion. Except for the fact that the whole scale of wages is lower, general conditions as regards women in mills in Sholapur may be taken as typical of those in the cotton industry as a whole.

Their earnings are absolutely necessary to the family, as the husband's wages are not sufficient to give even a bare subsistence.

The better paid men, such as weavers, rarely allow their wives to work. Among them is quite a proportion of women who have to support themselves and their families unaided.

Not a great many come from the hereditary weaver caste as this is still a flourishing occupation. They have been driven to the mills by scarcity and by the attractiveness, often illusive, of a cash wage.

Their children are quite definitely worse off than those of the hand weavers or the agriculturalists. In the former case the workers are in their own homes and can keep an eye on the children; in the latter the children can often be near their parents and are in open fields.

APPENDIX III

HANDLOOM INDUSTRY, SHOLAPUR

By Iris Wingate

According to the Government Families Budgets Report, 1928, 'There is no other important occupation for the working classes in Sholapur except cotton spinning and weaving'.

In different parts of the city colonies of handloom weavers are to be found. Speaking generally, the men do the weaving and the women and children do all the auxiliary processes. The bulk of the weavers are Sadis, a Hindu weaver caste, but a certain number of Mohammadan weavers from the adjoining State of Hyderabad have also settled in Sholapur and there they ply their trade. These are newcomers, but the Hindu weavers have been there for many generations. As a rule the weaving is done in workrooms varying in size from the largest, which employs 300 hands to numerous small workshops where two or three men are employed, the former having fifty looms, the latter usually four. All are pit-looms, even those up on the first floor. The entire production is confined to women's *saris* and bodice pieces. All the yarn is got either from the local mills or in the bazaar, in which case it may come from Bombay or Japan or, in the case of artificial silk (much used) or gold thread, from England or France. All the dyes come from Germany.

As no power is used none of these workshops come under the Factories Act and hours of work depend on trade, usually from about 7 a.m. to 7 p.m., with a more or less regular stop at noon and irregular rests in between. In many cases the primitive method of throwing the shuttle backwards and forwards by hand is still in use. In other instances an improved loom is used, which about trebles the output.

One workroom is run by a relative of Tikekar's, and displays the same ingenuity. All the machinery is modelled on modern textile machinery, but made locally of wood, tin and nails! He used to employ power, but has discontinued it and uses hand-power only, thus avoiding the Factories Act. He has another similar establishment outside the city which has a 'model village' attached. The women do reeling and pirn winding by the same method as in the factory, only the machine is turned by a man instead of power. They weave up to 40 and 60 counts. The place is a curious cross between the old loom industry and a modern mill. The wages were stated to be from Re. 1 to Re. 1–8 a day for weavers; it is all piece work. The women earn As. 4 to As. 6 a day. All the dyeing is done in a village nearby, where most of this work is done for the whole of Sholapur. The workshop has its own shop in the town for selling its goods. In the largest workshop already referred to, the auxiliary processes are all done in the old primitive way, the warp is set up in the open street, every bobbin is wound separately by a woman, and it is the same organization precisely as the little four-loom cottages, except in the number of people employed. The earnings were stated to be As. 14 to Re. 1 a *sari* and it was possible to make a *sari* in a day. Women get As. 6 to As. 8 a day. Work hours were from 4 a.m. to 10 p.m. Workers seemed to come and go as they liked ; there were no regular shifts. A Bombay firm took the whole output. The light in the rooms was good, a contrast to many smaller homes where the people work in such darkness that it is hard to see how they can turn out good work. The women worked on the verandahs and in the open courtyard, and they had their children with them. Some of the people were from Hyderabad State. Each had to pay a deposit of Rs. 3 to Rs. 5 before being allowed to start work.

The four-loomed hut. This was the smallest number found and usually one or two outsiders were employed for the looms, the family doing the supplementary work, if there were enough of them. Wages are about Re. 1 a *sari.* Women get As. 2 for sizing if they are employed, and they can do two or three a day, making As. 4 to As. 6. They work from 7 a.m. to 7 p.m., with pauses for rest and food. One of the poorest weavers found had four looms which he worked himself with two hired men ; one loom was idle. He supported thirteen persons, himself, two women, two men, and the rest children. The yarn was obtained from a money-lender who also took all the cloth made. They were weaving women's and small girls' *saris.* The men received As. 6 to As. 14 a *sari* according to the size.

The Tikekar type of reeling machine was met with occasionally. In one case about thirty women were working in a small room that was entirely filled with the machinery and the women. There was only very inadequate means of exit ; the air was absolutely full of fluff and we all coughed violently on entering.

In another case of a large work-room, wages were stated to be Re. 1 to Rs. 2 a *sari*, and a *sari* took one to one and a half days to finish.

There were stated to be 20,000 looms in Sholapur, though this may be an exaggeration. Very few are purely family concerns. Women weavers are occasionally met with, but not often. Weavers all require additional help and it is customary to have young boys, either one to each man or one among four or five looms, to assist the weavers. These are paid direct by the master and not through the weaver. The whole industry struck one as prosperous and very well organized. They did not consider that they suffered any competition from the mills. It is certainly true that they do not manufacture the same things.

Mohammadan Weavers. These, as already stated, are immigrants. They were driven by poverty from their State and are settled on the outskirts of Sholapur. They are altogether poorer, and their work is more primitive than that of their Hindu neighbours. They hang on the outskirts of a closely reorganized guild and find competition severe.

One house had six looms and another sixteen, in rooms surrounding a courtyard. The looms in the former were of the old type with the shuttle thrown by the hand, thus taking four days or so to finish. In the large establishment both varieties of loom were to be found. Real and artificial silk were both found in use. The yarn was Japanese, which was stated to be stronger than the local product. Both men and women worked at the looms and were paid Re. 1–8 per *sari* on the old type and As. 14 on the new. The men made about five *saris* in a month on the former, the women four to six. Women on other work got As. 2 to As. 8 a day. Hours were more or less from dawn to dusk. Some of the women employed in the larger establishments were of the Hindu weaver caste.

One house was found where the looms were standing idle because the people could not afford to work them. Two men in the family had gone to the mill, though so far only as extra hands. There were six adults and some children in the family. The women were all purdah, so none of the Mohammadan women could get any work outside their own house.

Both Hindu and Mohammadans complained that the price of *saris* had dropped from Rs. 13 a *sari* some years ago to Rs. 4 or Rs. 5 now, so that the work was not nearly so paying as it used to be. If it is due to the competition with the mills, it is indirect and not direct, as the mills do not manufacture *saris*. On account of the demand for variety in the borders, and their comparative complexity in design it does not pay so well to make *saris* with cloth as with silk.

APPENDIX IV

HANDLOOM WEAVING IN INDIA

By R. Manohar Lall

WEAVERS are to be found in every nook and corner of India. Every village, every town, has its weavers, the majority of them weaving specialized types of cloth. Benares is known for *saris* with gold texture. The towns in the Central Provinces, in Gujarat and in Maharashtra weave a number of distinct types of cloth, but South India is really the bee-hive of the handloom industry. In the Madras Presidency alone there are more than 170,000 handlooms working, employing about a million people. This Presidency produces about one-third of the total handloom production in India. Besides *saris*, skirt cloth, *khaddar*, shirtings and suitings that are produced on handlooms, there are other cloths also which are specially made for export, such as *lungis*, Madras handkerchiefs, *safas*, *gajis* for Burma and Singapore, and the turbans and Arabian ticking exported to Arabia, Persia and Africa. These articles are manufactured out of cotton, silk, wool coir, kora, aloe, jute and plantain fibre. The Central Textile Institute at Madras is the centre of light for the weavers of the Pesidency.

In the Punjab there are about 200,000 adult weavers actually engaged in the trade, the total number of handlooms at present working is 176,393 ; of these only 2,973 are improved types of looms. The value of their total production for one year is about five crores of rupees, and the goods are exported to Persia and Afghanistan also. In the Punjab itself are consumed large quantities of cotton, silk and woollen fabrics. There are four District weaving schools and one central weaving institute in the Punjab.

In Bengal are manufactured the famous Dacca *saris* which have been made for hundreds of years from handspun yarn of 80 to 300 counts as well as many other varieties of cotton cloth. The Central Government Weaving Institute at Serampore has introduced a special type of fly-shuttle loom which is extensively used.

In 1921, in Bihar and Orissa, including the Indian States, the annual output, manufactured mostly out of coarse counts, was of the value of 5 crores, while the consumption of mill cloth, both foreign and inland, valued 7¾ crores.

Altogether it is estimated that at the present time there are not less than 20 lakhs of looms at work, supporting about 60 lakhs of people. This industry is therefore easily the most important industry after agriculture, and employs the largest number of people engaged in any cottage industry in India.

It may be mentioned that sufficient yarn is not being produced in India because a large amount that is produced is consumed by the mills themselves which in the majority of cases have their own weaving sheds. In spite of all that is imported from Japan, England and other foreign countries, the yarn is too dear for handlooms. In 1916 and the years that immediately followed it the raw material was not sufficient. The *charkha* has an unlimited possibility in this direction. The handspun yarn is rapidly improving and it is expected that within a short time a large majority of the spinners will be able to spin yarn of desired counts. There are about five million *charkhas* in the country. *Charkha* spinners should not only be able to earn for themselves, but also keep the weavers from entering the mills in big cities. It is in order to provide mutual help for the spinner and the weaver that *khaddar* is based on hand-spinning, and it is also intended to eliminate middlemen so far as the transactions of villagers are concerned.

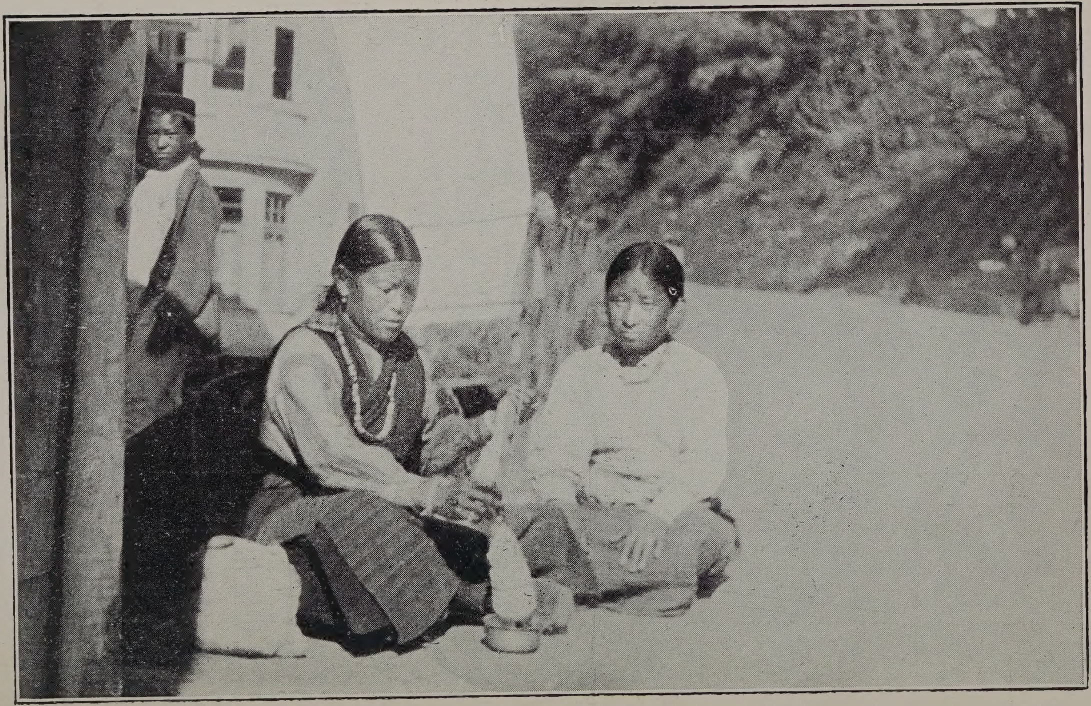
In the minds of those who are not in touch with the weavers and their trade, there is an impression that the handloom is passing away, giving place to power looms, in spite of the increasing amount of propaganda that is being carried on for the *charkha* and handloom *khaddar*. But the fact is that it is still holding its own in the throes of a great struggle. In 1924–25 the total consumption of piece goods in India was reckoned at 4,930 million yards, of which 36·5 per cent came from Indian mills, 35·5 per cent from imports, and 28 per cent from handlooms. This 28 per cent meant 1,380 million yards.

The appliances and looms of the weavers are as primitive and crude as their methods, although the textile departments of the different Provincial Governments are doing their very best to introduce new types of looms and methods to enable the weavers to increase their earning capacity. A brief description of some of the crude methods of the weavers may here be given.

There is more than one way of preparing yarn for weaving, but the common method is as follows:

The yarn that is brought from the bazaar in bundles is immersed in the sizing material, made of rice or wheat gruel, and dried in the sun. It is next stretched on pegs and with the help of a big brush the threads are separated, the excess of sizing material removed and a smoother appearance given. The necessary quantity of yarn is then wound on warper bobbins and fixed on a small wooden creel. The threads then are drawn through the reed for the purpose of keeping each thread apart. These are further passed through two healds, each having an alternate thread passing through it. These healds are lifted alternately by the foot for the shuttle to pass through.

Another method is to put the hanks of yarn on a *charkha* or swift and wind on reed or bamboo spools on the spindle of the *charkha*. The warp is then prepared by fixing sticks in the ground in rows two by two facing each other at a distance of three feet or so, while a woman carrying two short sticks with spools attached unwinds them as she walks, passing the yarn in and out of the sticks. The yarn may be warped from ten to twenty yards: if it is ten yards, she may have to walk about ten miles to finish the job; usually she has to walk an average of about 15 miles. The



WAYSIDE SPINNERS

warp is then taken off and either immersed in a sizing solution for about twelve hours and then stretched in the sun to be dried, or it may be stretched by means of strong pegs on the ends and the size applied with a brush. The weaver then brushes it to separate the threads from each other. After this it is attached or knotted to the old warp which is still fixed on the loom, and pulled out; this process saves the time that would otherwise be taken by the drawing in of the yarn through the healds and the reed.

Still another common way of preparing warp is by winding the thread on pegs on a wooden frame. This process is used for indoor work and is done sitting. Here in place of walking, the left hand of the woman covers almost as much distance by moving back and forth as the feet cover by walking in the other method described.

II

The following detailed information has been collected from different provinces to enable the reader to form an idea of the actual expense incurred and the number of days spent by the weavers in manufacturing articles of different types, and to give an idea of the difficulties and handicaps from which they suffer.

Only some representative facts concerning the actual cost of running a handloom are given, as obviously it will be impossible to deal with the matter fully in this short report.

1. In the Central Provinces, a nine yards cotton *sari* with silk border requires:

	Rs.	A.	P.
Yarn, dyeing and sizing	3	0	0
Border silk	5	0	0
Total Rs.	8	0	0
Sold in bazaar for ... ... Rs.	10	0	0

This *sari* is prepared in four days including dyeing, sizing, etc.; the average earning is As. 8 per day.

In this region a movement is on foot to stop fellow weavers from using the fly-shuttle; in fact in one village nearly all those using the fly-shuttle are socially boycotted. The reason is that with a tendency to sell as much goods as possible in order to earn more, the quality of goods is not maintained on account of hurry; owing to overproduction the margin of profit becomes extremely low and the merchant does not care to receive the weaver in his old courteous way. By curtailing production, that is, by using *hatha* (hand-thrown shuttle) instead of *patka* (fly-shuttle) it is hoped that the prices will soar, giving higher profits with better quality work; for the common impression is that hand-shuttle cloth is stronger. It may be mentioned here that in the towns and villages the women usually wear set types of *saris*, so that each town knows what to make. For the same reason the lower classes buy from the local market. If the weavers curtail production the prices in that market will rise. Moreover goods made in Khapa (Central Provinces), for instance, will sell in the Khapa market only and not in the Nagpur market. Similarly, Nagpur goods will sell in the Nagpur market only and not elsewhere for the *panchayats* of the weavers will not allow such a thing.

The Hindu weavers here have introduced a system of stamping for their goods. They have elected their own committee whose job is to mark goods of a particular quality and grade. A charge of one pice is made for such a 'trade' mark. This means that a uniformity of quality is maintained and no further questions are asked by the merchants or middlemen. Thus, if Nagpur *saris* become noted for durability and this mark remains, the continuity of demand for their goods will ensure the livelihood of the weavers.

Once when prices began to go down, they readily joined a co-operative society. From the society they received advances in yarn, etc., and sold their goods through it. But in better times they began dealing with middlemen who offered a little more, and they would steal society yarn, get inferior goods made in out-stations, bring them to the society in order to get them passed as their own production manufactured out of the yarn provided by the society, and thus receive good rates. The society then resorted to the use of some distinctive marks, but the weavers used the same marks falsely. Eventually the co-operative society marked the cloth while still on the loom. This Weavers' Co-operative Society, however, had to be liquidated, for they would persist in their dishonesty. Similarly, when the rates for yarn went down in the bazaar, they immediately purchased this and the yarn of the co-operative society would remain unsold.

2. Central Provinces.—

	Rs.	A.	P.
Thirty-two hanks warp white	12	4	0
Sixteen hanks weft white	7	10	0
Dyeing warp	3	0	0
Dyeing weft	1	8	0
Winding on bobbins for warp, per bundle ...	1	0	0
Warping and drawing through heald, 160 yards	2	0	0
Winding on shuttle for weft at one anna per piece of eight yards. 160 yards cost	1	4	0
Warping for border	8	0	0
Total Rs.	36	10	0

This takes one day. The whole process of preparing the warp and weft and beaming takes four days. The winding of weft for shuttle for 160 yards, which is done by women or young boys, costs one anna for a quantity sufficient for a piece of eight yards: therefore the total amount paid for this purpose is Re. 1–4. If done by a woman of the family, she winds every day enough for an eight yard piece. The merchant pays him at an average rate of Rs. 2–10 per piece of eight yards, less As. 1½ as commission to the broker. (A merchant will not buy except through a broker and this will be paid to him by the merchant.) Therefore the total amount earned by the weaver is Rs. 50–10. Out of this he gets for himself Rs. 14 for 20 days' work—at eight yards per day—plus two days that he himself spends on the preparation of yarn. For the other two days' work he pays in cash which should not be counted. Four full days are taken for the preparation of yarn for a length of 160 yards. Thus for 22 days' work he earns Rs. 14 or for 30 days' work Rs. 19–1–6. As in the majority of cases his children or his womenfolk do the winding for the warp and the weft his cost of labour of Re. 1 and Re. 1–4 may be deducted and added on to his income, which will be a total of Rs. 21–5–6. On account of family sickness, festivals and other social obligations a weaver usually does not work for a full 30 days; he either works shorter hours or takes some days off and thus he may properly be said to work at an average of 26 days in a month. His earnings, therefore, will be Rs. 18–8 and his daily average earnings As. 10 a day, which includes his profit as well as the wage.

(*a*) Husband and wife and three young children: average income: As 10 per day.
(*b*) Husband and wife, and two young children: As. 10 per day.
(*c*) Husband and wife and one boy of 12 years: Re. 1–2 per day.

These Mohammadan weavers who weave cotton only are having a hard time. Unlike the Koshtis (Hindu weavers) they are not trying to introduce a trade-mark under the supervision of a central body and to maintain a first class uniform quality. The Hindu weavers have decided to use 60s. with pure silk edging from 10 September 1928.

3. Central Provinces.—A small town, full of Hindu weavers manufacturing Maratha *saris*; about a thousand sold in the bazaar every day. Husband and wife working together can earn As. 12 to Re. 1 per day by using a fly-shuttle. (Among these people there is a movement to stop using the fly-shuttle in order to curtail production and earn more profits. Moreover, the purchaser here considers hand-shuttle cloth stronger than fly-shuttle.)

4. Maharashtra.—Ordinary cotton *saris* of nine yards take one day to weave, and two days for the preparation of yarn equals three days. One day's wage for weaving is As. 12. Total cost of this *sari* is Rs. 3–8 or Rs. 3–12 and it is sold for Rs. 3–12 or Rs. 4 respectively, net profit being about As. 4

Thread for shuttle bobbins is prepared by women and usually kept ready for a full month's use. For such work a woman earns between Rs. 6 and 10 a month.

Example: A man uses an automatic handloom; three *saris* of this kind can be woven in one day. He uses Japanese yarn which he—like scores of others—considers stronger and smoother than Indian mill yarn. He does not manufacture *khaddar* because there is no demand for it.

A *sari* of nine yards with artificial silk threads running through it costs Rs. 8–2 and sells for Rs. 9–6 and net profit is usually between As. 6 to As. 10. This *sari* takes one day to weave; its yarn requires four days' preparation.

He has to sell his production at low rates because of competition due to fly-shuttle, for the supply exceeds the demand.

5. Gujarat.—To one weaver the merchant supplies the artificial silk yarn and the weaver is paid Rs. 50 as wages for a length of 175 yards of *sari* cloth which takes one month to complete. Besides the help of his

wife and children, he employs a winder on Rs. 15 per month; pays Rs. 3 for sizing and As. 10 for drawing-in. He therefore earns Rs. 31–8 per month.

Another makes Burmese *lungis*. For 75 yards he gets Rs. 40. The man has one servant, a boy. He himself does not work the loom, but works on the warping frame from which is prepared the warp beam. He had a large number of bundles of ready-made warp lying in his room and from that one gathered that he paid more time and attention to selling prepared warp in the bazaar. It was his wife who worked the loom and finished the whole piece in two months. She takes so long a time on account of the complicated design.

It was said that the Hindu weavers called Khatris were heavy drinkers, one reason for this being fatigue. Their servants start work at about 8 a.m. and finish at 5 p.m. Almost all these weavers get their material from the merchants. The gold thread used for *saris* is made at Surat.

A third is the proprietor of a factory having 60 looms. He paid an average of Rs. 15 per month to winders while the lowest amount earned by a weaver was Rs. 20. On an average his men earned between Rs. 15 and Rs. 30, though some earned as much as Rs. 50 per month.

A few years ago, here as elsewhere, the handloom industry was flourishing. Even now, not only *saris* but *lungis* for far away places such as Akyab and Singapore are manufactured. In the hope of earning higher wages or profits some Mohammadans of Benares have also come down in large numbers. These workers from Benares complained of hardship from lack of work. As people could not afford to purchase their goods, the merchants paid them low wages. They do not sell their goods directly. All the material for *safas*, *lungis* and *duptattas* is provided by the merchants. They have only to size and dye it.

6.—A *safa* of 11 yards (used by Hindus in Surat on occasions of marriage) if completed in two days will bring them about Re. 1–15, that is, about As. 14 a day. A man working very hard can earn Re. 1 per day, but it is not done usually. The merchant sells the *safa* in the bazaar for Rs. 4, but pays for the cost of material and As. 10 for the drawing-in work at the heald. In the case of *dupattas*, this man is paid Rs. 2 which is considered fair, because the *dupattas* are cut out of a length of 75 yards.

The man who furnished this information was teaching the art of weaving to his son. He said that on an average he earned Rs. 15 per month, but it appeared that he really got Rs. 20 per month on an average.

The rent of the one big room with a tiny cell attached to it was Rs. 9 which was shared by three families for the purpose of accommodating looms and cooking places.

7.—Two brothers with two servants worked in a room with four looms, for which they paid Rs. 12 rent. Their old mother helped by winding; the same complaint was made, the lack of sufficient orders. One loom earned As. 14 per day. The demand for their *safas* and *dupattas* has gone down during the past seven years.

These men being Mohammadans spent more on food and clothing, while their womenfolk, unlike Khatri women, could not help them much in their work because of purdah. The Khatris spent a good deal on drink.

It may be mentioned that an additional As. 4 per yard is earned when the warp is of real silk and weft of artificial silk, and As. 8 per yard for all real silk work.

A. makes bed tape, three yards long and two and a quarter inches wide, takes three hours, cost of yarn, etc., for 125 yards is Rs. 4 and sells for Rs. 7-8. So the amount gained including wages is Rs. 3-8. For working nine hours a day this length will take a little over five days, which means earnings of As. 11 a day.

	Rs.	A.	P.
8.—Carpet weaver. Carpet, size 6 ft. x 6 ft., sells for...	20	0	0
Cost	14	0	0
Profit, including wages for 4 to 6 days' work Rs.	6	0	0

A beam for 50 towels can be prepared by a boy in one day. If sent to the bazaar, charges for it are Re. 1–8. An adult or a boy can weave 12 towels of a yard each in a day of eight hours. Wages and profits are Rs. 3. For 50 towels the amount earned will be Rs. 12–8. In other words, if a towel-maker devotes three days to the preparation of yarn and four days to weaving he will earn Rs. 12–8 for seven days' work. His average income for one month calculated at 26 days' actual work will be Rs. 47–12 or Re. 1–9 per day.

In a small handloom factory, women reelers got As. 6 a day; weavers got Re. 1–4 a day. One of them being a woman earns only As. 10 a day.

Two women and one man engaged in gold and silver border weaving earn among themselves Re. 1–8 a day.

9.—Bengal. Like many other places, there is hardly any *khaddar* weaving here. The weaving is entirely of *saris*, and these are of two principal varieties, namely those with gold thread and those without. They are all cotton or mixed. The hours of work are eight to nine daily. The monthly earnings of a weaver may be reckoned at Rs. 17 to Rs. 18.

The cost of material is Rs. 4 per *sari* without gold thread, and the cost of labour may be roughly calculated at Rs. 3–8–0. The average price is Rs. 8–0–0 so that profit on each finished article does not seem to amount to more than As. 8 at the most. The women folk here usually do not help in the preparation of yarn, etc. They say that their general condition is bad on account of the competition of cheap foreign goods and the higher qualites of Benares stuff.

10.—South India. For 20 yards of *sari* cloth, taking three days to weave, warp yarn Rs. 3–8–0; weft yarn Rs. 5–0–0; total Rs. 8–8–0; wages for weaving Rs. 3–0–0; gold work As. 10½; winding As. 5. The total cost Rs. 12–7–6. Sold at the rate of As. 11 per yard, the net profit for three days is Rs. 13–12–0, minus Rs. 12–7–6 = Re. 1–4–6; for one day about As. 6.

11.—South India. Silk *saris* of nine yards, to be sold in bazaar for Rs. 130–0–0. Weaver's net profit Rs. 20–0–0. The *sari* takes eighteen days for weaving and four days for the preparation of yarn, warp and weft, dyeing, sizing, etc. The weaving of this *sari* is a slow process; because of the check pattern, time is spent lifting the warp-threads to make the design.

A *sari* having gold lace in addition to checks in the middle part requires the service of two boys, who keep lifting the warp-ends for the border. Such a boy is paid at the rate of An. 1 to As. 1½ per day. Here in a small room the weavers had two looms working, one on top of the other.

Wages of the weavers range from As. 12 to Re. 1–4. Cotton twists are imported from England and gold lace from France and synthetic dyes also come from abroad. The profits must necessarily be small. Local competition and importation of foreign cloth add to their difficulties. The use of the fly-shuttle is discouraged for fear of breaking the fine twists.

Here the other main industry is dyeing, especially the red colour. Young girls tying knots on white cloth earn about As. 2 a day (As. 1½ per thousand knots) while a clever woman earns as much as As. 6 a day; when these knots are untied after the piece is dyed, they leave white dots on the red ground. The women, here as elsewhere, help their men folk by unravelling the skein and preparing the warp.

One big community called the Saurasta Brahmins migrated from Gujarat and Malwa a few hundred years ago and now devotes itself entirely to weaving and dyeing.

12.—South India. About 20,000 in the weaving industry. Between As. 6 and As. 8 is the average wage for a weaver. Silk weaving is done by Saurastras, cotton weaving by other castes. The former are engaged solely in silk weaving with rich lace brocades. Some of these cloths are used by Mohammadans in South India and sent as far as Afghanistan as prayer cloths and for marriage ceremonies. The price of pieces of four yards each ranges from Rs. 12 to Rs. 25. Cotton cloth of an extremely fine type is woven and embroidered. Both foreign and Indian mill yarn is used. Women help in subsidiary work of weaving. The tendency on the part of weavers is to be independent of the middlemen and to purchase their own yarn. Saurastras manufacture cloth mostly for Mohammadans. One or two young boys or girls are employed to lift the ends of the warp. A girl of eight was seen sitting at the loom quite late in the evening looking tired out.

These weavers work regularly with off-days on festivals. They earn a net profit of about As. 8 a day.

Here as in many parts of India, the weavers do not wear cloth made by themselves. Ordinarily they use mill-made cloth.

13.—South India. In a handloom factory here (mostly fly-shuttle) the weavers earn about As. 12 a day for nine hours' work. Women employed on reeling and winding earn about As. 4 to As. 5 a day.

The weavers working at home earn about As. 10 a day for manufacturing *angavastrums* and Re. 1–4 a day on *safas* used on marriage occasions. They are experiencing great difficulties because of lack of work.

A. has a small factory and sells a silk *sari* at Re. 1–8 per yard, spends for material and wages Re. 1-6 per yard and earns a net profit of As. 2 per yard; pays wages about Re. 1-0 per day.

B. makes an eight yard pure silk *sari* in eight days with the help of his family and gets Rs. 12 as making charges. Material is supplied by the merchant. Therefore daily wages were Re. 1-8; but his average daily wage is usually not above Re. 1-4-9 if he takes an average of four days a month off.

C. makes a silk *sari* of eight yards in 15 days with the help of his family and receives Rs. 20 as wages. The material is supplied by the merchant and the wages are paid according to the weight of the silk plus the weight of the gold used in the texture. Though according to calculations this man earns Rs. 40 per month, actually perhaps he does not earn more than Rs. 34-12 per month.

D. is a rich man, buys his own yarn, and manufactures *saris* with the help of his family and servants. He pays Rs. 35-0 to his servant who makes two *saris* of eight yards each and two bodices of about one yard each. This amount can be earned in a month even by a young boy who knows weaving; but actually the weavers take about a month and a half to complete the job.

E. living as a tenant in the big house of the above-mentioned rich weaver, said that he could easily earn Rs. 35-0 as wages for a silk *sari* of eight yards. The *sari* he showed was of gold with a square of two feet solid gold ground in the middle, and gold flower designs on both ends.

14.—South India. Skilled weavers earn As. 7 a day for weaving a carpet of 8½ x 54 inches. Those who are less skilled earn As. 4 to As. 5 a day for smaller sizes.

If a skilled weaver weaves and sells his own carpet, his expenses and earnings are as follows:

	Rs.	A.	P.
Cost of 10 lb. yarn for warp and weft	4	12	0
Cost of dyeing	4	2	0
Wages for reeling	0	2	0
Wages for weaving two carpets	0	14	0
Total Rs.	9	14	0
The two carpets sold in bazaar realize ... Rs.	10	8	0
Net profit		10	0
Net profit for one carpet		5	0

Therefore a carpet weaver can earn about Re. 1-8 as wage and profit in two days, that is, As. 12 a day as wage and net profit.

15.—Mysore. A weaver earns Rs. 3-8 per loom per week for weaving *khaddar* which is about As. 8 a day.

16.—United Provinces. In a small handloom factory, the weavers were earning about Rs. 15 per month; *jharans*, *dosuti* and towels, etc., were being woven. Out of 80 looms only 30 were being worked because of insufficient orders. The manager who was in touch with the surrounding country said that the weavers were having an extremely hard time. This was corroborated by a Mohammadan weaver who has a small factory in the town. He said that the independent weavers in the town could hardly earn As. 6 a day. These latter made *khaddar* and sold in a small market ten miles away. A Mohammadan cloth seller sold a piece of 12 yards which hardly secured him a profit and that with the help of his wife. If the yarn is provided by the shopkeeper, he earns a profit of As. 3 to As. 4 on the whole piece. If the weaver himself takes his goods to the bazaar and sits on the pavement or at the place where the weavers sell their goods every evening, he does not earn even half the amount of the profit earned by the shopkeeper, for the buyer knows that the weaver, unlike the shopkeeper, cannot afford to wait as he must sell to buy yarn or food for the next day. So he sells at hardly any net profit. If the *mahajan* (moneylender) supplies the yarn, he purchases it at the rates he thinks proper and the weaver remains a slave. The *mahajan* advances him money for marriages, funerals and other ceremonies at an exorbitant rate of interest and the debt remains there from father to son for generation after generation.

17.—United Provinces. The goods of one *durrie* weaver are in great demand; the striped ones are for local use only and the small ones are sent to Kaaba, the holy place of Islam in Arabia, where the pilgrims (Hajis) purchase them as prayer mats, and bring them back to India as souvenirs. He gets his yarn from the shopkeeper or the agent. For a *durrie* of 6½ feet by 3½ feet he is paid Re. 1 for making charges. If he has only a few to make, he and his son work together and are able to make two in one day, earning about Rs. 2 per day. When the demand is large, he employs servants to whom he pays As. 8 per day, and on each *durrie* he earns a net profit of As. 8 a day. There are few other *durrie* makers of this kind in the town. When asked why other weavers do not take to making *durries* he replied that they did not know how to weave one properly; they would not be able to produce the same texture, thickness and evenness as he could. He had no complaint to make and he looked quite satisfied.

18.—United Provinces. Interviewed a group of 12 weavers; all complained of the inadequacy of profits, and want of ready cash. All have a very hard life. The profits hardly ever exceeded As. 6 per day. One weaves eight yards of *khaddar* cloth in a day of ten hours, and his expenses for a length of 52 yards warp, and weft of 16 are Rs. 13, plus As. 10 paid to a woman labourer for preparing bobbins for weft, plus Re. 1-12 for sizing, and warping by stretching of sticks on the ground, which process takes about two days. So preparing a piece of 52 yards of *khaddar* a man works nine days. *Saris* are not woven in this town. The only other kind of cloth that is manufactured by them is *lahgna* cloth (used for women's skirts) and although the profits are a little higher, they have to put in more yarn and labour.

F. can hardly earn As. 6 a day and if he himself sells the cloth in the market he can earn a profit of As. 1½ to As. 2 per piece.

G. begins work at 4 a.m. and goes on working till 9 p.m. and is able to earn As. 8 a day.

It must be remembered that the monthly income of a weaver will be much less than 30 days' earnings per month because of sickness, festivals and social ceremonies.

Most of these weavers have taken up other work, such as cooly work on building and roads; others have become cart drivers. They never heard of co-operative societies or an industrial inspector.

They all use the ordinary primitive type of loom; they have not the cash to get it fitted with a fly-shuttle which should not cost more than Rs. 6. They did not know who was going to teach them to use it, for they could not spare time and money either to earn or pay for a new article, being too poor and living from hand to mouth.

They do make *gabroom* for shirting, etc., but there is not much demand, as mill-made cloth is preferred. These weavers cannot hope to go on at this rate, as they do not specialize as the *sari* makers do in other parts of India. They are really suffering a great deal. All use mill yarn.

19.—United Provinces. H. by working nine hours a day with the help of his wife makes two dozen dusters a day. The contractors—the middlemen—sell such dusters to a local mill for Re. 1-14 per dozen. The weaver earn as wages only As. 12 per day. Three hundred yards of warp make thirty dozen dusters.

Thin *jharans* (dusters) have a width of 26 inches. The weavers sell their own product at the rate of Re. 1-4 per dozen. As they usually make 50 dozen every month, the total amount received by them is Rs. 75. As told by the weavers themselves, they work 25 days in a month and manufacture two dozen a day. Their wage per dozen *jharans* is As. 4, so for two dozen a day they earn As. 8 daily; which means Rs. 12-8. Further, they say their net profit per dozen dusters is As. 6¾. Reckoning at six pies for 50 dozen it would be Re. 1-9. Therefore the total earning in a month of twenty-five days is Rs. 14-1. Their average earning did not appear to go beyond Rs. 15 per month.

On actually calculating the cost of yarn for a warp of 300 yards of cloth and weft, besides sizing, winding, beaming and weaving, it was found that a weaver could not earn more than As. 14 a day including his profits.

Here, as in many other places, if the weaver himself goes to sell he wastes half a day and sells his goods at about cost price, for the purchaser knows his real economic condition. If, on the other hand, he takes it to the merchant he has not even the slightest chance of bargaining, for he too knows him well. He must, therefore, sell at a very low rate, but he saves his time and energy.

These people are Hindu weavers called Khatris or Sutiyas.

In this locality the Mohammadan weavers earn between As. 8 to As. 10 per day for weaving ordinary *durries*, and As. 12 per day for *jharans* and towels. If they purchase their own yarn, usually they earn a net profit of As. 1½ to As. 2. They are having a hard time in spite of hard work.

20.—United Provinces. The weaver manufactures 36 yards of *khaddar* of mill yarn (cost of yarn Rs. 6) in about twelve days and sells for Rs. 12: thus earning As. 8 a day. This little amount includes his profit, if any, and the wages of his wife and himself for the preparation of yarn—sizing, warping, drawing-in and weaving. The actual weaving of 36 yards takes six days of eight hours each.

21.—Punjab. The weaver was supplied with yarn for warp and weft and his remuneration for turning it into a 20 yard piece of cloth was Re. 1-4, the weight of yarn being three seers, consisting of 500 threads (ends) for warp. He wove this length in three days, working ten hours a day; thus earning As. 10 a day. For calculating his monthly wages, consideration must be paid to the off-days taken for festivals, family sickness, etc.

I. makes *khes* (plain white thick bed sheet or bed cover) 126″ x 29″. Length cut into half and sewn together and turned into the proper size of 63″ x 58″. Weight of the hand-spun yarn, one and half seers. The cost of preparing the *khes* is Re. 1-8, and it is sold for Rs. 3. It takes one man four days to prepare the warp and weft, sizing, etc. Therefore a man earns As. 6 a day. If he has a wife to help him, he will earn As. 10 to As. 12 per day, for in that case a *khes* will be ready in two days.

J. along with his wife makes honeycomb towels, weight of one being, four chhataks. They take one day for preparing the yarn and two days for making six towels. Therefore he makes six towels in three days or two towels in one day. As the making charge for one towel when yarn is supplied by the customer is As. 5, the husband and wife earn As. 10 a day between them.

K is a young man who prepares coarse quality *khaddar* of 20 yards, with no one to help him, and the wages earned in five days were Re. 1-6.

22.—Punjab. The weaver earns As. 12 as a day on a piece of 12 yards *khaddar*, making it in two and half days. The shopkeeper earns a profit of about As. 4 on each piece. He complained of hard times. He wants ready cash. He himself cannot sell at a profit. The people will not buy *khaddar*, hence his difficulties. He uses mill yarn and his impression is that only a few weavers use hand-spun yarn, the reasons being, firstly, that it is not available in sufficient quantity, and secondly, if available, it is not brought to the weavers for sale. Mill-spun yarn is sold in the bazaar, but not the hand-spun which could be used at least in *khes* and *durries*. As already said he thinks that hand-spun yarn is not being produced in sufficient quantity. The yarn that is spun by the women in the town is usually consumed by themselves for getting small *durries* or khes made for home use. The village women usually get their cloth made for wearing purposes.

The following list gives an idea of the approximate cost of the different kinds of looms that are recommended for use with their approximate production per day:

	LOOM	COST	PRODUCTION PER DAY
		Rs.	Yards
1	Pit-loom fitted with fly-shuttle slay	51	8 to 15
2	Fly-shuttle loom on frame	50	8 to 15
3	Automatic handloom	360	20 to 25
4	Jacquard attachment fitted on country loom ...	260	6
5	Jacquard attachment to fly-shuttle loom ...	265	10
6	Jacquard attachment to automatic loom ...	300	15

III

As one looks back over this sub-continent of India, picturing the hundreds of thousands of weavers plying their looms, and their womenfolk unravelling the skeins, and winding and warping the yarn, one can see a real struggle for existence. One can see it on their faces. The majority of them work extremely hard and long hours to eke out a bare living, living from day to day, depending for the supply of yarn and the sale of goods on the merchants, traders and middlemen. Their poverty does not give them enough time to look around and derive inspiration from those who are better off, to take up new ideas and suggestions. Illiteracy and ignorance add to their misery. If there is no sickness in the family, social and religious ceremonies and other occasions take away much of their valuable time. In case of sudden prosperity, the temptations to strong drink and gambling may take away the extra sum that might be kept for the rainy day. About three years ago in a big city of the Central Provinces the Koshtis (Hindu weavers) along with others began to indulge in *sutta* (cotton speculation), at a time when they were not prosperous, and as a result they lost heavily and were obliged even to sell their possessions. About nine years ago when they were prospering, strong drink and excessive expenditure on marriages and funerals took away most of their savings. While on the one hand the competition of mill-made cloth diminished their earnings, and the world conditions their real wages, on the other hand their primitive crude appliances combined with equally primitive methods of work have pressed them down more and more. They are often unaware of labour-saving devices. If some are too poor to purchase fly-shuttle slays that can be fixed on country looms costing about Rs. 5, others have not even heard of them. This kind of loom alone will increase their output by 50 to 100 per cent, while their effort and cost will be much less. At present the weavers are in the clutches of the brokers and middlemen who charge a commission of As. 1½ to As. 2 per rupee from the weaver and the same amount from the merchants, with the result that the handloom cloth becomes dearer by nearly 25 per cent simply because of the middlemen. It must be mentioned here that a weaver's constant effort is to extricate himself from such an arrangement, but the truth is that the broker is much more clever than the ignorant weavers. The latter have neither the time, the patience nor the means to be independent of him. They want ready cash for food and yarn. The merchant who advances yarn sells it to the weaver at a bigger profit and similarly buys the ready-made goods at his own rate, with the result that the weaver suffers both ways. He has no organized market either for buying yarn or selling his cloth. He is at the mercy of the *sowcar*. Ignorance, illiteracy and poverty are at the root of their real difficulties.

It may be mentioned here that the cloth which is in direct competition with mill cloth is of medium and coarse counts. Silk and cotton gold embroidered *saris*, *lungis* and Madras handkerchiefs, and scores of different types of other articles are still free from direct competition. The difficulties of their makers may be simply due to the low purchasing power of the intending buyers. Hardly any advertising on modern lines is done to bring the costlier goods to the notice of those who can afford to buy; ordinary quality goods can be and are sold locally, but this is not the case with specialized goods of dearer type. A wider market is needed. But without technical knowledge and efficient and rational methods of work the weavers will continue to work harder and harder and, comparatively speaking, will be less and less able to withstand the onslaught of the competition of the power-loom, and the contracting of the world economic situation.

During the War the handloom industry suffered greatly for want of the dyes that used to be imported from Germany.

If the weaver's time were not taken up by the process of preparation he would have more time to devote to the actual weaving. Though this would throw the womenfolk into partial unemployment, it would tend to bring down the prices of their goods, thus creating a wider market and more demand. One of the reasons why pure *khaddar* is not being bought in such a large quantity as it ought to is that it is dearer than mill-made cloth in spite of all the extra expenses that are inevitable in the way of overhead charges, insurance, taxes, etc.

Whatever improvements may be deemed to be necessary in other directions, nothing can be done unless there is a sound and effective organization. Things are being carried on in a crude and haphazard way throughout India. The same pit-loom that was being used two thousand years ago is still in use and the methods are equally primitive.

These are some of the main difficulties on account of which the weaver is suffering greatly. But there are other causes also over which he has no control, such as : the exchange ratio at 1*s*. 6*d*. instead of 1*s*. 4*d*. per rupee which gives an added advantage to foreign manufacturers ; the fluctuation in world prices of cotton ; the simplicity of life and the low standard of living in India, and the low purchasing power of the villagers who form 90 per cent of the population of India. Not only the handloom industry but all other cottage industries in India are suffering simply because the purchasing power of the masses is so low.

IV

Why is it that in spite of the competition of mill-made cloth and other circumstances the handloom industry has not died out? Some of the reasons are: (*a*) The poverty of the masses, which has prevented foreign cloth from being imported in large quantity. (*b*) There are still places left where mill-made cloth has not yet penetrated. (*c*) Cloth made on the handloom is still considered more durable. (*d*) Cloth, especially *saris* which are made in the villages where the purchasers live, must be purchased locally either for convenience or out of necessity—on credit or on payment made in kind. (*e*) There are certain kinds of cloth to be used on ceremonial occasions which must be made on a handloom. (*f*) The complicated designs of the borders of *saris* and the comparatively smaller number of any one pattern required prevent the mills from undertaking their manufacture. (*g*) The handlooms that formerly manufactured *saris* or other ordinary cloth for purposes of wearing apparel have now begun to manufacture towels, dusters, plain thick bed sheets and bed covers for which there is a growing demand. A cotton mill may get such types of cloth manufactured by the handloom weaver and may sell it as its own product. (*h*) There are thousands of looms in India which manufacture a number of different types of cloth for export only and for which the demand is constant, such as, *lungis*, Madras handkerchiefs, *safas*, etc., for Burma, Singapore, Arabia and other foreign places. (*i*) *Khaddar* which must be of hand-spun yarn and must be made on the handloom, is being used in much larger quantity than a few years ago. In some parts of the country it has infused new strength and enthusiasm in the hearts of thousands. This *khaddar* movement was born in 1921 and it has given work to thousands of spinners and as a result about twenty-four lakhs of rupees worth of *khaddar* is sold every year. It is estimated that there are four million regular consumers of *khaddar*. But the number of those who buy handloom cloth made of mill yarn is eighty-eight millions. (*j*) One main reason why the weaver in certain parts of India continues to make a living is the *dastur* (custom) of wearing a particular kind of cloth or *sari*. (*k*) Weavers being a caste the tendency is to stick to their caste work even if it is unprofitable. While some work as daily wage earners on the looms of middlemen or merchants, others are too poor to free themselves from the clutches of the money-lenders, or the merchant who supplies yarn or money and receives manufactured goods. Quite a large number have joined the nearest textile mills; others have taken up entirely different work. (*l*) Mill yarn has also exercised a steadying influence on the handloom industry as the majority of the weavers consider it to be stronger and smoother than the handspun yarn.

It will be realized that the economic condition of the handloom weavers in the country is extremely unsatisfactory, and this state of affairs is not of recent growth. Apart from such fluctuation as is common to all economic transactions, the difficulties of the weavers have continued to increase with the rapid introduction of mill-goods. During the Great War they did a roaring business, but it has been dwindling since. If it were not for the non-co-operation movement, coupled with the boycott of English cloth and the great strides made by *khaddar*, quite a number of them would have been driven out of employment long ago. It was not, however, only on account of the movement for buying indigenous goods that they were saved; it was due mainly to the circumstances mentioned above.

V

The Government have done a good deal in the past to ameliorate the economic condition of the weavers, notably the Madras Government, who from the beginning of the present century have been making systematic efforts to improve their lot by introducing fly-shuttle slays, better healds and reeds, frame and automatic looms, cheaper dobbies for designs, Jacquard machines for intricate patterns, combined warping and sizing machines; and generally by improving the primitive looms of those who cannot afford to incur expenditure on purchasing the best kind of looms First peripatetic weaving parties were formed in 1913 and 1914 which went from village to village, demonstrating the working of the fly-shuttle looms. The weaver's own pit-looms were fitted with fly-shuttle slays and other improved appliances, and the parties stayed a sufficiently long time in each place to get things actually started. Such places were revisited to see whether the weavers were carrying on their trade on new methods or not.

All the bigger provinces have Government textile institutes which provide instruction in all the processes of handloom weaving, dyeing and textile testing, hosiery, etc. They arrange for the manufacture of weaving appliances and serve as a permanent museum for the display of improved appliances, machinery and products. These institutions are like laboratories where experiments are conducted along all lines of handloom industry for the benefit of the weavers. Here both the literate and the illiterate are given training to enable them to be better workmen either in their own homes or as managers of their own handloom factories.

The Government have, in addition, organized weavers' co-operative credit societies in order to provide the necessary facilities. In some places where weavers' co-operative societies supplied the members with yarn and accepted the goods thus produced, the members dealing with the society were not honest. In times of difficulty they would co-operate freely, but whenever they found the bazaar prices a little higher than what were paid by the society they would begin to take orders from the merchants in the bazaar and occasionally make a cloth of inferior quality for the society. Similarly they bought yarn from the bazaar if the prices were lower even by a few pies. There is no doubt that they resorted to such tricks through poverty and lack of education.

Though the Government has thus been encouraging the use of the handloom, their efforts have not borne much fruit.

VI

The general impression created on the mind of the writer is that the economic condition of the weaver in India is bad. His average daily earnings cannot be said to be above As. 10. Those manufacturing specialized types of cloth or of cloth above 40 counts are better off than those who weave ordinary cloth which suffers through the direct competition of mill-made cloth. The economic problem of the weavers is capable of solution, and although already serious attempts are being made to improve their lot, they deserve still more serious attention and protection. The appointment by the Government of an All-India Committee to study the condition of handloom weaving and to suggest measures for its improvement is very desirable.

The weaving industry ought to be progressive to be able to keep its head above water and therefore should be conducted with all those business methods which are used in organized industries. To achieve this education among weavers is necessary, but in the initial stages a co-operative society is equally indispensable, especially to provide new appliances and the application of scientific methods and to put weavers in touch with new markets and their agents. There are practical difficulties in keeping the weavers combined in a co-operative society year after year. It would therefore be better if the Government industrial inspectors for a stated period devoted themselves to the study of different markets in India and abroad, and as a result guided the weavers of their respective localities as to the types of articles that might be in demand, or for which markets might be created. Just as the Commercial Department of the Government through its Trade Agents supplies necessary information to those who seek it, the inspectors should guide the weavers in the sale and manufacture of their articles and in everything that pertains to the weaving industry. As far as the supply of yarn or the advance of money is concerned, a few *sowcars* may be specially licensed to conduct such business, their books of principal and interest and the supply of yarn to be made subject to official inspection, the idea being to see that the licensed *sowcars* advance money on a fair rate of interest and yarn at market price. The greatest difficulty that arises is in the disposing of the goods. The *sowcar* must accept them at market rates, but he must be helped in turn in disposing of his goods by the inspector. His will be a steady and large business and with a fair profit. Though the non-licensed holders will be free to do business in this industry, the licensed *sowcars* will be the accredited agents of the people as well as of the Government in this respect. The weavers will be made to feel quite at home in dealing with them. Co-operative societies have not been very successful in the past, mainly because of the comparative business inexperience of the co-operative inspectors and also their bureaucratic irresponsibility which is absent in the case of merchants who pay their undivided attention to their business. Another reason for the failure of co-operative inspectors to tackle such business matters is the absence of personal contact in other things besides the official business in hand—the kind of relationship that a *sowcar* has with his customers. The markets are shrinking and production is increasing owing to improvements in looms and methods and the greatest caution is therefore needed to steer the handloom industry safely. To attain the desired end, the creating of markets for new designs and new types of articles, study of foreign markets, foresight, knowledge and general business acumen are necessary for the successful conduct of the most important cottage industry in the country.

That the handloom industry requires protection there is no doubt in the mind of the writer. The details of such protection should be worked out carefully. Weavers might be granted cheap loans, and *takavi* loans like those given to peasants might prove extremely useful in the case of handloom weavers also.

The conditions of work in handloom factories are usually not bad, but occasionally houses are met with where men and women work in dark, dingy and stuffy rooms. Children help their parents in preparing the yarn and on those looms on which *saris* of complicated designs are manufactured they are often made to work for long hours. Some children were noticed to be working at dusk when they should be out and playing, and their faces showed extreme fatigue. When compulsory education comes into force, such children will be free from this task, at least during the day.

The womenfolk are constantly busy. They run about from children to cooking, to preparing the yarn, or in the case of some, to weaving. If the handloom took its warp from a central warping factory, and if such a factory were started in every big weaving centre of India, the womenfolk would not have to work, and the money which they earn now would go to the warping factory. But they would then be able to devote the time thus saved to weaving on an extra handloom or to some subsidiary industry such as gold thread preparation and dyeing in fancy designs; or they might be taught some home industry having a local market.

It may be repeated that the weavers ought to be organized in order that they may purchase yarn cheaply and without the interference of middlemen. The thing that requires the most careful attention is the sale of their goods. What they want is more and more work and opportunities to utilize the labour of their families. The aim of the weavers should be to weave more and more of set and specialized types of cloth, for herein lies their salvation to a great extent. Therefore the first essential is the finding or creating of markets. The Salvation Army, which makes specialized types of goods, have well-conducted depôts in important centres of North India, besides selling goods by advertisement and by catalogues. This method of marketing goods can be followed in a modified form in the case of a large number of specialized types of the goods manufactured on the handloom.

The weaver communities deserve the sympathy and moral support of Christian Missions in India, even if no other form of help can be given. For the village homes ought to be kept intact against the drift to the big industrial areas in search of work in cotton mills, and the family life of the weavers in the cities should be prevented from disintegration due to lack of work. The Missions will thus be tackling the problems in the right way, that is by keeping the people independent and by preventing them from crowding to the slum areas of Bombay, Ahmedabad, Cawnpore and other big manufacturing cities. It is better to strike at the root of the evil than to do patchwork later on when it is not effective. The industrialization of India is not possible in the same sense as in the west nor is it desirable. Denmark can give many lessons to India.

The training of Indian Christian men as weavers, except when they desire to have such training for the purpose of qualifying themselves as demonstrators, weaving-masters or managers of small handloom factories, is not desirable. In girls' schools, attended mostly by village girls or by daughters of poor men, the teaching of handloom weaving should be compulsory, so that these future wives may be an economic help to their husbands either by weaving cloth for their own requirement or for sale. For an average Indian Christian woman there is no home or cottage industry which is more paying in the long run, for in the case of lace-making, embroidery, etc., the articles made are usually meant for sale only, while handloom weaving will be of equal service for home consumption. Though such girls or women will be taught more than weaving of simple cloth, it should be considered a Christian duty by the Missions to advise them to use as much and whenever possible, handspun yarn, enabling them to give opportunity to millions of men, women and children who can earn at least one meal a day by spinning on the *charkha*. Those acquainted with the abject poverty of India will realize that even one anna a day, if that is all that is earned by hand-spinning at present, is not a sum to be considered negligible.

APPENDIX V

THE ECONOMIC LIFE OF WOMEN WORKERS IN COTTON MILLS

By R. Manohar Lall

This report is the result of an investigation conducted among the women mill-workers of an industrial town in the Central Provinces for the purpose of securing reliable information regarding their wages and expenditure, hours of work, working conditions inside the mills, the socio-religious environment in which they live, and such other matters as would throw light on the position of women workers in the industrial life of India.

Six *bastis*—residential areas—inhabited by the Mahars[1] were selected for this enquiry. They have settled down in this city, as in other industrial towns of the Central Provinces, in order to earn more money, their life in the villages being one of great poverty. There they did not own any property. Even their houses were built on other people's land, which could be pulled down any time by the landlords. On enquiry they stated that they would never have come to the city if they had had any property in the villages—land, houses or cattle. Those who were not weaving tilled rented land. Obviously they could not all take to weaving as it was not paying, even if they adopted it in addition to the tilling of the land. If every Mahar made his own cloth, there would be no market for his surplus and the produce from the land was not enough to keep him and his family. So they have sunk deeper and more hopelessly into debt incurred for betrothal, marriage and funeral ceremonies, and other religious and social customs. And hence those of the more adventurous kind drifted to the cities where they began life anew, getting hard cash for their labours; paid off their debts and settled down, about 90 per cent owning their own houses built on Government or Municipal land given on lease. Now they have no incentive to go back to their villages, but occasional visits are paid to see their friends and for festivals, ceremonies or business. Quite a number have gone back to assist their relations at the time of sowing and harvesting, and it is one of their desires to return permanently, buy land and settle down. But this is not always possible in the case of Mahars. After having thus given a brief background of the community from which the womenfolk have come who work in cotton mills in large numbers, it will be easier to follow this inquiry, which covered 378 women, 8 of whom were unmarried. Most of these worked in the reeling, winding and folding departments,

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[1] A low caste of Hindus, their jobs in villages being weaving, field-labour, cultivation and carrying of carcases. In the cotton mills of the Central Provinces they work side by side with the higher castes, and in this city their strength is about 60 per cent of the total number of mill operatives.

Reeling Department. If a woman works at 12 counts, she earns Rs. 5 per bundle.[1] In a day of ten hours, usually not actually working more than 9 hours, a woman can make about 20 bundles of 12 counts. The average number of working days in a month is 26, minus days of absence for sickness and other reasons.

Though a woman can earn as much as Rs. 12 to Rs. 13 per month the average earnings are Rs. 8 to Rs. 10 per month, and Rs. 9 per month or about As. 5 a day may be considered a reliable average for all working women.

Winding. If at 20 counts, a woman can wind about 1¾ bundles a day, earning about As. 5, rates for other counts being adjusted to bring earnings to about the same figure. The average earnings come to about the same as in the reeling departments. In artificial silk winding the rate is about As. 8 per bundle, a woman preparing about one bundle per day. A half-time girl earns Rs. 4-12 per month for five hours' work a day. The total number of such girls working in the folding departments is very small.

In the Nagpur cotton mills the women work in an atmosphere which is not much humidified. Mostly water is used for damping the thread. The sheds are less noisy than other departments and are clean and well ventilated. But in many other parts of India the working conditions for women workers are very far from ideal. Dust, fluff, and noise affect their health considerably.

These women get up at about 4 in the morning, light the fire, put something on it, go and wait their turn at the latrine or go a distance in the open, wait their turn again at the water tap, or struggle at the well, come back and prepare the meal, look after children and feed them. A woman wakes her husband at 5-30 a.m.; he returns from outside at about 6 a.m.; takes tea or something that was left over from the previous evening, or some freshly cooked food, and leaves for the mill, reaching there about 6-30 a.m. The wife, having finished her washing of utensils, locks up the house—if nobody is at home to look after children—and carries a child and the food, reaching the mill at 7 a.m. It is not in every mill that a woman is allowed to come late. At 11-30 a.m. she comes out, goes to the tap, gets drinking water, and spreads the food in front of the husband in some corner of the mill compound. She waits while he eats. He smokes or goes away to chat to friends while she eats her breakfast of food that is meagre and unnourishing for a mother, in fact for any one; washes the plates and is easily in time to go back to work after having fed the child. She comes out of the mill a few minutes earlier than her husband, rushes home, fetches water and prepares the meal. The husband wants something to eat immediately after his return. After eating this he goes out, perhaps to the bazaar, and she starts preparing the evening meal; according to the personal observation of the writer she is hardly ever free before 10 p.m. at night. Hers is an unending life of drudgery with no recreation. Even on festivals she is naturally the one who works most. All her hardships are due firstly to abject and desperate poverty and secondly to ignorance. And yet, in spite of what has been said above, when the writer suggested to the different groups of women the reduction of working hours, they protested vehemently, as this step would bring down their earnings considerably and that would be calamitous. But, they said, they would be extremely happy if the income remained the same and the hours of work were reduced. One woman said that in no circumstances should the hours be reduced seeing that hundreds of widows depend for their livelihood on their mill work. Another woman complained that no one sympathized with the women workers in their strenuous work at home and at the mill. The strain of wifehood and motherhood made them look quite old at 30 years of age.

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[1] Eight hanks = one reel; three reels = one bundle;
one bundle = forty small reels.

As mentioned above, 378 women were covered by this inquiry. Information was sought under the following five heads:

1. How many are self-dependent.
2. How many help others.
3. How many are adding to their husbands' wages.
4. How many have relatives to help with housework.
5. How many young children per woman.

It was found that only 91 out of 378 women were self-dependent. There was no one to help them in case they were thrown out of their jobs. There were 20 women who worked to help others. Two hundred and seventy-five women, or about 73 per cent, were adding to their husbands' wages. In other words, 295 women, or 78 per cent, worked either to help their relations or husbands. Out of these 378 women, only 140, or 37 per cent, had relatives to help with house work.

These 378 women have among them 638 children under 12 years of age, or 1·7 children per woman; 114 or 30 per cent had either no children or none under twelve; 97 or 25 per cent had one child each; 23 or 6 per cent had four children each; 19 or 5 per cent had five children each; 4 or 1·7 per cent 6 children each, and 3 or 1·3 per cent 7 children each. Besides the facts given above, the following information was also gathered individually and from groups of women living in the different *bastis* of the city.

Almost the whole of their earnings was spent on food and clothing and payment of their long-standing and unending debts. If any money is saved as a result of the earnings of more than one member of the family, it flows into other channels. If not spent on drink and gambling by the men the social rivalry will oblige them to spend more on marriage or funeral ceremonies, not without the addition of further debts. Their saving usually takes the form of jewellery.

Their usual food consists of boiled rice, or *chappaties*, pulse or vegetable fried in oil and occasionally some pickle, or chutney. It has been noticed that if a family man earning Rs. 20 a month begins getting Rs. 40 per month as a result of working in the weaving departments, the quality of food and clothing does not rise proportionately except in the case of children who are perhaps given a little milk to drink, though in general he is able to look after his family in a little better way. Usually he will continue eating the same quality of food and clothe himself, in the same old way, except during marriages or festivals. This absence of proportionate rise in the standard of living is due mainly to ignorance and lack of education, and also to his past accumulation of debts which must be paid off as soon as possible. No appreciable change takes place even if a man by reason of his becoming a *mukadum* (foreman in charge of about fifty men) begins drawing about Rs. 80 per month. The quality of his food does not rise in proportion, nor the number and quality of his clothes, but such a man feels quite in a position to marry a second and a third wife. The more wives the merrier because they are an economic asset, in so far as they get employed in the mill and earn enough for their own livelihood. It must be remembered that the inquiry was confined to the Mahar community only, a typical mill-working community scattered over the industrial towns of the Central Provinces and Berar. A man working in the weaving department, where he earns more because of piece work and better rates, usually has a great desire to own a house of his own, to excel in social ceremonies and go to places of pilgrimage.

In reply to questions regarding drink, the women said that they never drank except for three evenings during the confinement period. As for their menfolk the following information was given by different women:

1. The husband drinks occasionally—usually when offered by friends or at festivals and funerals.
2. The husband quarrels with his wife on some pretext or other if prevented from taking a drink any day; the wife has therefore allowed him to drink daily.
3. The husband, two grown-up sons and a widowed daughter work in the mill. The widow earns for herself and her daughter of fifteen. The income of the sons who are married and living with their parents is spent in the house. The father contributes Rs. 5 per month for food, the rest of his earnings, Rs. 25, is spent on drink.
4. The husband a drunkard, she works to maintain the family.
5. The husband a total abstainer—probably belonging to a sub-caste, prohibited from taking strong drink and meat.

On inquiring whether they would work in the mills or elsewhere if their husbands earned enough wages, they said they would not, provided there were no debts to be paid off.

'If you got all the money you wanted, what would be the first thing you would do? What is your chief ambition in life?' On the supposition that they got Rs. 1,000 each, they said that the first thing they would do would be to pay off their debts; secondly, they would immediately leave off cooly or mill work; and thirdly, they would open some business in order to be independent.

Their chief ambition was to live a happy and contented life.

In reply to the question 'What would you do if turned out of the mill?' they said they would work as:

1. Coolies in the streets.
2. Coolies on road repairs.
3. Coolies on house-building works.

Usually treated leniently by the contractors.

4. Field labourers at harvest time.
5. Sellers of fruits, etc.
6. Domestic servants.

In reply to the question ‘Do you ever speak to your children on moral and spiritual subjects, in the way, for instance a Christian mother would according to her light?’ they said that they do not. They, however, point to the pictures of the gods and goddesses and explain what is depicted therein. The women themselves learn from mendicant teachers or local men who occasionally give religious discourses. According to the light that there is in them, they do influence the lives of their children. Their example teaches them self-sacrifice, tolerance, charity, worship and family love, though the aim and object and the method may be different from Christianity.

It has been shown above that as a result of a woman, especially a mother, working in a mill, the home life of the family is destroyed. The father is away, the mother is away and the children are either left behind unattended, or if carried along to the places of working, inhale the dusty atmosphere of the compound of a mill, while in the case of jute mills infants and children of tender age play about under the machines and in the passages that are very heavily laden with dust and fluff. In a small number of mills provision is made for crèches, but the women workers through their ignorance are not making full use of them. The wages being low, the wife must earn to supplement her husband’s income.

It is not fair to hold the employers of labour in India responsible for such a state of affairs, except to this extent that they should pay higher wages, if they can, and provide better working conditions. But higher wages must go hand in hand with a capacity to spend on appropriate and useful objects. Through education alone this consummation can be attained and simultaneous effort is needed from the Government and other agencies to hasten it. But it is essential that wages are raised first, even though they may for a time be wasted on unproductive and undesirable objects. The experience of spending will not only educate the workers, but having freed them from semi-starvation will enable them to spare energy for the higher things of life.

Probably organized industries in India will suffer no irreparable loss if women workers are withdrawn, for in quite a number of cotton mills that were visited by the writer recently throughout India, men work as winders and reelers and generally do the work that is commonly being done by women. The objection will be raised by the women themselves who will naturally be most unwilling to forgo the little amount so necessary for their bare living, especially widows and deserted wives who depend entirely on their own earnings.

The writer visited quite a number of institutions in different parts of India for the purpose of finding out what alternative occupation the women could engage in if turned out of mines and mills; but he did not come across any suitable home industry that could be taken up immediately and by a large number of women, except *charkha* spinning. Already lakhs of women spin in their spare time and get *durries*, bed covers, towels and clothing woven by weavers. Other home industries could be adopted by women if they were not too specialized and technical, and the market not too small. One of the main difficulties is that cottage or home industries are as a rule the monopoly of respective castes and the few exceptions that are left do not afford much scope for profit. The Mission agencies have a great chance of doing lasting service. On the one hand industrial missionaries could devote themselves to the cause of the industrial workers in industrial areas, the women missionaries could open afternoon schools (for two hours only) in the localities in which the mill-hands reside, where they could teach plain sewing, some home industry, singing, games, and conduct infant welfare centres in co-operation with other organizations.

It may be mentioned that there are quite a number of places in India where Indian Christian or higher caste women earn about Rs. 7 to Rs. 10 per month by devoting a few hours a day to some industry or other, for instance, by making *azarband*—the silken or cotton bands for pyjamas and *silvars*, embroidering *qullah* tops—the cap inside a turban worn in North India, making small carpets by whisks of dyed jute fibres, gold and other lace making, Delhi gold embroidery on women's skirts, or shoes, or cutting and sewing of plain clothes on sewing machines, hosiery, knitting, fancy dyeing, etc.

The Punjab is the only province in India which has appointed an industrial instructress to organize industrial schools for the purpose of teaching crafts to women. Already keen interest is being evinced by women in this new and extremely desirable venture.

To sum up, it is the writer's opinion that the women of India must be kept away from the mills and their family life preserved. To effect this the wages of men workers and their standard of living must be raised, ignorance and superstition dispelled by propaganda and other methods, and more attention paid to adult education among women. The Mission agencies and the Young Women's Christian Association have before them an unparalleled opportunity for service in these directions.

APPENDIX VI

THE ECONOMIC CONDITION OF WOMEN WORKING IN COAL MINES

By R. Manohar Lall

THE writer recently had an opportunity of visiting quite a number of coal-mines in different parts of India. One of the many impressions left on his mind is that of a black mass of humanity—men and women—digging out the graves of their souls, living lives shorn of all that is beautiful, and, in many cases living degraded lives that are mainly sustained from the founts of liquor shops, very conveniently and considerately provided by the Excise Department of Government. There are no arrangements for recreation, so, too often, the only diversions that are available are the liquor shops and prostitution. One sight that the writer saw, that of a couple of young girls, 16 to 18 years of age, dead drunk, and reclining against the wall of the liquor shop, was pitiable. It is not uncommon for women in these areas to drink, or occasionally to be compelled to drink, by their menfolk.

In some of the mining areas of Bengal and Bihar the miners can hardly be said to have any home life. Both husband and wife work in the mine. In the evening they are dead tired and are most unwilling to cook a meal, either for themselves or for their children. They purchase some parched grain (in some places such grain is soaked overnight in water and distributed at cost price or free by the mine owners because of the unwillingness of the workers to cook their meals) or extremely cheap bazaar stuff to eat in place of cooked meals. This food is usually washed down with the help of liquor. As the standard of comfort is extremely low, not much expense is incurred on clothing and the luxuries of life. Some mine owners provide good houses, others provide kennels unfit for human beings. As a result of ignorance, bad housing, lack of education, and the absence of healthy recreation, the life of the workers is far from what it ought to be. The vitality is low, because of insufficient and unsuitable food, and the excess of liquor and prostitution. So, instead of rising gradually in the capacity to earn more and growing more efficient they slide down the scale and get weaker in every respect. They are, therefore, considered to be the most inefficient miners in the world. The output per head is 328 tons per annum in the Transvaal, whereas in India it is less than 100 tons. It is no doubt true that the Indian miner is really an agriculturist and therefore can hardly be expected to come up to the level of the skilled miners of other countries.

The mines are worked either by the aborigines or by the imported cultivators of land. At the time of sowing or harvesting there is in many mines a shortage of labour, but it is not very serious. In some mines in the Central Provinces the labour must be imported from as far a distance as the northern district of the United Provinces. In the mine itself the *sirdar* or the contractor who provides the daily labour is paid a commission of six pies per rupee of the wages earned by such labourers. Those coming from other districts do not always bring their wives with them, so that in the case of a number of people temporary and undesirable alliances take place which tend to disintegrate family life. Those who have settled down in a mining area more or less permanently work together with their wives, or with women companions, the husbands digging and the women filling the tubs with the coal so cut. As the Government intends to withdraw all women from underground work within the next ten years it was thought desirable to give definite information about some of these workers. An inquiry was therefore conducted by the writer in a group of collieries all belonging to one company in a district of the Central Provinces. These mines are situated in the midst of arable lands, the villages being not far away from the mines and the workers apparently paying equal, if not more, attention to their fields than to the work in the mines. There seems to be no unemployment amongst the agriculturists of this district. If not busy in their fields, they are busy earning in the mines.

In connexion with this inquiry the following statistics and information were gathered:

1. The total number of women employed in all the collieries of the company was 883.
2. The proportion that came from a distance, that is, not living in colliery lines was 65 per cent to 75 per cent.
3. Probably 10 per cent are unmarried girls, who live at home with their parents.
4. A few of the women support invalid husbands, but generally, probably, in 80 per cent of the cases, their earnings go towards helping the support of the family.
5. They earn on an average Rs. 2–4 to Rs. 3 per week.
6. About 80 per cent of them work in the fields during seed-sowing and harvesting.
7. Most of the women who live in the surrounding villages have someone to look after their housework and children. If there is only one woman in the house, she does not usually work in the colliery, especially if she is a stranger in these parts. Such women with infants or young children secure work on the surface. They then frequently dope their children with opium, and thus prevent them from causing any disturbance to their work. There is no doubt that miners' wives have an intense desire to go down to the mines to supplement the income of their husbands.
8. If excluded from work in the mines, probably 10 per cent would go back completely into village life; the remainder would have to search for cooly work.
9. About 30 per cent work on the surface. The position generally of

women workers in these collieries is that only some 20 to 25 per cent are professional workers settled on the collieries and who work regularly for four to five days per week.

The balance (75 to 80 per cent) are villagers who look upon the collieries as a means of supplementing their incomes by working in the mines when not engaged in cultivation or harvesting. By this means they are able to earn good wages in cash to purchase not only additional and better food for themselves and their families, but better clothing and little luxuries which would be impossible if the collieries were not available for them to work in.

They, therefore, are able to maintain themselves and their families at a higher standard of living than those who have not the colliery to fall back upon, and it has further to be borne in mind that in periods of bad crops the mines are an insurance against want and hunger.

In this area they are usually immune against victimization because there is always a shortage of labour here, and if they are in any way imposed upon, they can immediately go to another colliery to work. The result is that no subordinate imposes upon them, for if he did, he would immediately lose their labour. But they may be oppressed in other ways.

Another thing which is not uncommon here is for a man and his family, poor villagers with little or no land, to work hard in a colliery for a few years and to save sufficient to purchase land and animals. When they have attained that end, they leave the colliery permanently—or work just when they require additional cash. In this area, as in others, the women workers would not like to be turned out of their work, for naturally they require more money. The husbands should be paid a little more for their underground work to compensate for the loss of their wives' work. A few years ago there was no doubt a slump in prices, but the trade is getting better now.

It seems to me that ten years is too long a period to wait before the women are withdrawn completely from underground work, and I think that a period of five years would be sufficient to make the necessary adjustments.

In addition to the statistics and other information relating to the employment of women in the mining areas that have been put down above, further facts were obtained with the help of a man who has lived in the midst of these and the surrounding collieries for a number of years. It may be noted that the writer considers this mining area to be comparatively better than many other mines visited by him, for here sanitation and medical attention were better, and the district itself is a healthy one.

The following additional observations were made:

The women who worked in the mines got insufficient sleep and improperly cooked food due to fatigue and overwork, and as a result they were constantly suffering from some ailment or other.

Prostitution, mainly due to the nature of the work, is common. The *sirdars* and contractors oppress the women workers indirectly and in a subtle way till they yield to them. The men who come to the mine from long distances require a companion to fill the tubs while they dig the coal. This companion of course stays with the man as his wife till she is enticed away by another man, and so the deserted man gets another deserted woman, and so on. It is believed that about 40 per cent of the women between the ages of 18 and 30 years—most of whom have never been legally married to any one—spend their lives as kept women. A large number of them have unfortunately the tendency to earn their living by prostitution. The absence of regular and healthy recreation and amusement, coupled with monotony and plenty of liquor, is a fertile cause of immorality.

Bribery takes various forms. It may secure a regular supply of tubs to fill for full work, or other favours. Sometimes it so happens that at the end of the week when accounts are made of the number of tubs filled up by the diggers and their companions, the clerks or *sirdars* who are against certain couples purposely deduct one or two tubs from their accounts and add them to the names of those who are favourites, or those who pay tips to them. As a result some couples lose As. 8 to Re. 1 per week. It may be mentioned that the wages are paid according to the number of tubs filled by the coal cutter and his wife or companion. A coal cutter in these mines is able to earn about Rs. 40 per month and sometimes more, but the worker who keeps the account hardly ever gets more than Rs. 20 per month, hence the temptation to earn by tips and bribery.

The women fillers go down in the mines after the men at about 9 a.m. and work about 8 hours, but on busy days they remain below till about 6 or 7 p.m.

Usually the women who go first get the tubs first ; it is not uncommon for them to wait for an hour or so before they get the tubs, as sometimes the number is not sufficient to go round. In either case they lose money and time.

In case of accident in the mines of this area the employers look after them properly as far as treatment in hospital is concerned. The coolies are too ignorant to put up a fight for compensation according to the Act. But when a mines inspector is informed of an accident, he takes proper care of the case. In case of a fatal accident the Deputy Commissioner of the district pays the case personal attention.

The houses in which the imported workers are housed are 6 ft. x 6 ft. These are no longer built by this company and the usual ones are 8 ft. x 8 ft. with a verandah. No latrines are provided. The women work underground, even when pregnant, and are given no maternity benefit. No trained midwives are provided.

The mining areas are the veritable black spots of India. With notable exceptions they are neglected by the missionary bodies. The people in the mines require more attention : industrial workers in the cities have a number of societies working for them ; but in some mining areas even the trade union people are not allowed to do their beneficent work. If it were not for the Mines Act and the Compensation Act the conditions of the workers would be worse. The Missions have been pioneers along many lines. Let them provide specialists for work in these areas and open child welfare centres, schools for girls and boys, and generally help the people to improve their economic condition.

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